# SILICON TIMES REPORT

# INTERNATIONAL ONLINE MAGAZINE

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STR Electronic Publishing Inc.

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> 01/27/95 STR 1104 "The Original \* Independent \* OnLine Magazine!" . . . . . . . . . . . . . . . . . . .

- STR INDUSTRY REPORT - Compaq TOPS in '94 - NAVCis PRO 1.5 - Apple Licenses Logo - Wings of Glory - Prodigy SIGNS! - About 32 Bit - Jaguar DOOM Review - Legal WAR Clouds?

- Jaguar NewsWire - People Talking - STR Confidential!

-\* INTEL: "NEVER AGAIN!" \*-

-\* NEW UNISYS DEAL OK! \*-

-\* SHARP CLAIMS 3-D BREAKTHROUGH! \*-

\_\_\_\_\_\_

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> From the Editor's Desk "Saying it like it is!"

Since we don't have "real" winters here in the south, <g> I wish somebody would tell mother nature this little factoid. The morning frost and ice on the windshield is getting to be a real pain. If you believe that... I'll tell you another. Actually, the winters here in north Florida are a pleasure. They're cold enough to knock out the fleas and mosquitos but certainly not unbearable. I do not miss the snow shoveling and digging the car out of ice crusted ruts. One incident that seems to happen at least once every winter to those living (living?) up north is not missed a bit. Have you ever stepped off a curb into the street only to step on a frozen over puddle that's been obscured by snow or broken pieces of ice and wind up ankle deep in super cold ice water?? No sir, I don't miss the Northern Winter one bit.

This coming Sunday is the Super Bowl. During the day, We may go Bass Fishing and then watch the "game" and all its super expensive ad time. Have many of you noticed who the real winners seem to be through the playoffs? The advertisers; Microsoft, IBM, Intel, 3DO, Sega.. Etc.. How many others can you name that seemed to be "in the national sports spotlight" throughout the playoffs? They are the real winners folks, they got their logos and product names in-front of more people than their competition did with all their hard copy and regional cable ads and remarkably, did it faster and more effectively!

On new and different front, apparently the real game machine winner (Sales Wise) for Christmas, 1994 is estimated to be at "three sales to one" for all the others is none other than the 3DO format. There is no point in mentioning who was the most dismal. They'll soon disappear from the market anyway. Most all outlets report "almost runaway sales" for the 3DO format.

One can only imagine what the same picture will look like this coming Christmas 1995. One thing is for sure, advertising ..well placed advertising is the name of the game. 3DO enjoys a recognition factor that's beyond remarkable. Its superb. Regardless of opinions of Trip Hawkins and his methods the bottom line is he "pulled off the marketing coup" of the year. A few other "smart" companies could and would do well if they paid attention to Hawkins' methods of promotion and advertising.

Have a good weekend and of you are going to a SuperBowl Party, please don't forget your designated driver.

Ralph...

Of Special Note:

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STReport will be branching out further to Internet's userbase in the very near future. We've received numerous requests to receive STReport from a wide variety of Internet addresses. As a result, we're putting together an Internet distribution/mailing list for those who wish to

receive STReport on a regular basis, and we'll UUENCODE each issue and mail it to you.

If you're interested in being added to our mailing list, please, send your requests to either "dpj@delphi.com" or, RMARIANO@DELPHI.COM. Look for mailings to begin by October first. We are also considering a number of Internet ftp sites in which to post our issues for as well. Whatever we can do to make STReport available to you. we'll try it!

STReport's Staff

DEDICATED TO SERVING YOU!

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Ralph F. Mariano

Lloyd E. Pulley, Editor, Current Affairs

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STReport, with its policy of not accepting any paid advertising, has over the years developed the reputation of "saying it like it really is". When it comes to our editorials, product evaluations, reviews and over-views, we shall always keep our readers interests first and foremost. With the user in mind, STReport further pledges to maintain the reader confidence that has been developed over the years and to continue "living up to such". All we ask is that our readers make certain the manufacturers, publishers etc., know exactly where the information about their products appeared. In closing, we shall arduously endeavor to meet and further develop the high standards of straight forwardness our readers have come to expect in each and every issue.

The Staff & Editors

> STR INDUSTRY REPORT

LATE BREAKING INDUSTRY-WIDE NEWS

IBM/POWER-PC/PC SECTION (I)

Computer Products Update - CPU Report
-----Weekly Happenings in the Computer World

Issue #04

Compiled by: Lloyd E. Pulley, Sr.

\*\*\*\*\* General Computer News \*\*\*\*\*

>> Sharp Claims 3-D Breakthrough <<

Prototype displays for three-dimensional moving images that could be used for 3-D television in the future have been developed by European researchers for Japan's Sharp Corp.

Sharp Laboratories of Europe Ltd., based in Oxford, Britain, developed 14 and 8.6-inch liquid crystal displays, "enabling viewers to see three dimensional color images of television quality without wearing special glasses."

The new 3-D display is composed of two LCD panels, put together at a right angle with a mirror between them. Images shown on the panels are reflected on the mirror, creating a three-dimensional effect for the viewer.

In Tokyo, a Sharp spokesman said that marketing plans for the new displays have yet to be established. The spokesman said the displays also can be used in existing computers and video camera-recorders, as well as in various kinds of multimedia terminals to be developed in the future.

#### >> Maxtor, Hyundai Team on Disks <<

A manufacturing partnership to produce hard disk drives has been created by Maxtor Corp. and Hyundai Electronics Industries Co.

Reports from Maxtor say the agreement calls for the two companies to exchange technology and that Hyundai will build the product at its plant.

The two companies, which last year formed a strategic relationship when Hyundai invested \$150 million in Maxtor, say they hope their latest agreement will lead to production at a Korean plant by the summer.

# >> Spectrum Files Chapter 11 <<

Spectrum Information Technologies Inc. says it and three of its four operating subsidiaries have filed voluntary petitions for Chapter 11 bankruptcy. The company says it took the step in order to stem substantial financial losses and focus on developing its core wireless data transmission technology.

Spectrum says it also has closed its unprofitable Computer Bay subsidiary, which served as a national franchisor of independent resellers that sell microcomputers and related products.

#### >> Sony Spurns Toshiba Video Disc <<

Sony Corp., which has been under strong pressure to abandon its new video disc standard for one that is backed by a group of rivals led by Toshiba Corp., announced this week it will not give up on its own design.

The standard that was developed by Toshiba and Time Warner Inc. already has the international support of Matsushita Electric Industrial Co. Ltd., Hitachi Ltd., Pioneer Electronic Corp. Thomson Consumer Electronics SA of France and MCA Inc. of the United States.

Sony and Philips Electronics NV have developed their own standard, and the Toshiba-led DVD, which is a different and incompatible standard, has been a major blow to Sony's work.

The new systems are upgrades of music CDs which use new laser technology to store more data -- 7.5 times as much in the case of the Toshiba camp. Its disc is double-sided, with each side capable of storing five gigabytes of data, enough for 135 minutes of film. The Sony-Philips

version is a single-sided disc capable of storing 135 minutes of film and has a 3.7 gigabyte storage capacity.

#### >> Intel Vows Future Disclosures <<

#### "NO MORE PENTIUM CONTROVERSIES"

That's the promise from chipmaker Intel Corp., which, intent on putting its recent Pentium public relations nightmare behind it, says in the future it will openly disclose any new flaws in its products as they are discovered and analyzed.

Spokesman Howard High is reported as saying that his employer learned a critical lesson from the recent uproar over Intel's delay in informing the general public about an obscure flaw in its Pentium chip: that the public want to be fully informed about any problems in products.

"Rather than make a decision for the computer user we'll disclose (any flaw) in technical detail," High said.

# >> Apple to License Its Logo <<

Apple Computer, Inc. has announced a worldwide corporate brand licensing program. The computer maker will license its well-known spectrum-colored Apple logo and other Apple trademarks for third-party merchandise.

Apple has selected The Beanstalk Group, a New York- based company that specializes in corporate brand licensing, to represent Apple as its exclusive licensing agency.

"Apple's objective with the brand licensing program is to extend positive brand awareness and to protect our trademarks," says Mike Dionne, Apple's vice president of worldwide corporate communications. Dionne notes that research has shown strong consumer recognition of the Apple logo. He adds that the Apple name is associated with characteristics such as ease-of-use, innovation, high quality, good value and education.

## >> Dell, Microsoft Ink Win95 Deal <<

Dell Computer Corp. says it has signed a market development agreement with Microsoft Corp. that calls for the two companies to work together to market the upcoming Windows 95 operating system.

Dell says the deal ensures that its customers will be able to take advantage of the new operating system as soon as it becomes available. The computer maker adds that Windows95 will be offered across its desktop and notebook product lines.

"We see Windows95 as the most important systems software transition of the past several years," says Michael Dell, the company's chairman and CEO. "Dell is very focused on ensuring a smooth and rapid transition for our customers."

Dell adds that the company has begun training its technical support and sales teams to ensure that they are knowledgeable about the new operating system.

## >> Compaq Top PC Company in 1994 <<

Dataquest Inc.'s final 1994 PC shipment estimates show that worldwide personal computer market grew by 20% in 1994. And for the first time in more than a decade, a company other than IBM or Apple Computer led the world in PC shipments as Compaq leapfrogged the perennial PC shipment leaders. The market researcher notes that Compaq took the top spot in dramatic fashion by shipping 847,000 more PCs than any other manufacturer.

Compaq managed to lead the U.S. market by outpacing previous leader Apple. Packard Bell jumped to third in the U.S. market on the strength of its retail sales. IBM slipped to fourth, and Gateway 2000 rounded out the top five with 41% growth in 1994.

Compaq and Packard Bell experienced large growth rates as they shipped 53% and 101% more PCs in 1994 than in 1993, respectively. In fact, Compaq and Packard Bell were the only companies in the top five to increase their share of the market.

# >> Electronic Arts Wraps Up Buyout <<

Entertainment software publisher Electronic Arts says it has completed its acquisition of Bullfrog Productions Ltd., a European interactive game developer based in Surrey, U.K.

Bullfrog becomes a wholly-owned subsidiary of Electronic Arts. Financial terms of the agreement weren't disclosed.

Bullfrog is best known for its strategy and simulation CD-ROM games, such as Populous, PowerMonger, Syndicate, Theme Park and Magic Carpet.

Bullfrog is the third major interactive software company acquired by Electronic Arts in the past three years. Origin Systems Inc., a developer of entertainment software titles, including the Wing Commander and Ultima series, was acquired in 1992. Distinctive Software Inc., developers of such EA SPORTS properties as NHL Hockey and FIFA International Soccer, was acquired in 1991.

# >> Microsoft, Sony in Network Deal <<

Microsoft Corp. and Sony Corp. have announced plans to cooperate on the development of hardware and software for interactive broadband networks (IBNs).

The products will include continuous-media servers for on-demand audio and video, and interactive home terminals to allow users to access and navigate network services.

Microsoft and Sony plan to evaluate the technology in Microsoft's Redmond, Washington, laboratory in 1995 and later in conjunction with network operators and system integrators.

Microsoft and Sony will also work together to explore the creation of new markets in electronics for consumer and professional applications

through the development of next-generation devices and services.

"The continuing convergence of the consumer-electronics and computer markets makes Sony's strengths in building state-of-the-art products the perfect complement to our software expertise," says Bill Gates, chairman and CEO of Microsoft. "When we sat down to discuss the areas where we have shared goals, it was clear that consumers worldwide can benefit from our cooperative innovations."

Sony will participate in the Microsoft Insight Program, a collaborative program for network operators, original equipment manufacturers, and systems integrators offering training, technical information and participation in design and testing.

### >> IBM Triples Fourth Quarter Profits <<

IBM Corp.'s fourth quarter profits more than tripled to \$1.2 billion, compared with earnings of \$362 million a year ago. Fourth quarter revenue was \$19.9 billion, an increase of 6.6% from the 1993 period, after adjusting for the sale of the IBM's Federal Systems Company. Quarterly earnings were equal to \$2.06 a share; analysts had projected earnings of \$1.40 to \$1.93 a share.

Annual revenues climbed 6% to \$64.1 billion from \$60.4 billion. IBM said fourth quarter growth was strongest in its Asian and European markets, while the United States lagged and Latin America declined.

# >> IBM Recalls ThinkPad Adapters <<

IBM Corp. is recalling 32,000 power adapters for its ThinkPad portable computers. The company says the devices could create an electrical shock hazard.

IBM says it knows of no injuries caused by the adapter, which works with the ThinkPad models 360CS, 755CE and 755CD.

The computer maker notes that adapters purchased after October 1, 1994 bearing the model number AA19210 are the only units with the internal fault. IBM says it will offer replacement parts at no cost.

# >> Stanford Computers Invaded <<

Officials at Stanford University's Linear Accelerator Center, which helps conduct energy research for the federal government, reports their computers were electronically invaded last weekend, but apparently no permanent damage was caused.

Reports say the electronic break-in occurred Sunday night and was discovered Monday.

The hacker or hackers tried to get passwords and accounts to gain access again later. The center, run by Stanford for the U.S. Energy Department, cut off outside access to the system while investigating the break-in.

Chuck Dickens, the center's director of computing services, said "This is a public laboratory, there's no secret work here, nothing

confidential ... nothing at all related to national security."

Subsequently, the center said in a statement the intruder modified one of the computer systems in an attempt to obtain passwords and accounts for later access and then tried to hide what he or she had done. But it said there appeared to be no permanent damage to any research data.

> NAVCIS PRO 1.5 STR Spotlight

NavCIS Pro version 1.5 for Windows

# P E R F O R M A N C E U P G R A D E (25% to 30% faster!)

Filenames: WP15.EXE, UPGR15.TXT

Location : LIB 15 (Registered NavCIS Pro users only)

Version 1.5 was designed to increase performance. We changed our development tools in order to increase NavCIS's overall speed. First and foremost, we changed compilers and used an optimizing compiler.

Next, we upgraded our database library to a newer version (and improved on it). We've also upgraded the communications library. The net result is a faster, more robust NavCIS. Our beta testers report overall performance to be somewhere between 25% and 30% faster. Without significant file size increase.

We decided to use an optimizing compiler and "tweak" NavCIS's performance because we saw the day approaching when the amount of features added to NavCIS to make it easier and more powerful would, in fact, cause NavCIS to bog down. Rather than create a feature-laden Rubenesque program, we decided to trim NavCIS down \*before\* adding more features. This gives us the added benefit of creating a defacto standard against which we can measure future NavCIS performance.

# New Features

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Even though this is a "Performance Upgrade" we have added some interesting new features. Here's a brief recap of the new features:

- 1. Enhanced auto-quoting: now you can quote from the original msg multiple times with just one mouse-click.
- 2. Improved spell checker: edit or remove words that you have added to private dictionaries, also better suggestions provided.
- 3. Unread: mark a msg as "unread" and it will appear as New each time you fetch new messages. An easy to use reminder on a message by message basis. For e-mail and forum messages.

- 4. Saved indicator: shows you when you've saved a message to disk.
- 5. Exit & Pack: now you can "force" the databases to pack when exiting.
- 6. Define database buffer size: this allows you to choose the best buffer size for your data... and will cut down on long integration times.
- 7. Support for 8.3 forum filenames: CompuServe will shortly support 8.3 filenames (vs. the current 6.3 format).
- 8. 57.6k baud support: designed for users with 28.8k modems.
- 9. Reduced packet sizes: even the "noisiest" of phone lines can reliably download data by using the 128-byte packet size.
- 10. Improved OnLine help: topics like OS/2 and Windows NT are discussed, in addition to many other enhancements.
- 11. Support for "snap-to" mouse drivers. This can be configured by changing the SnapTo= in the NavCIS section of the NAVCIS.INI file.
- 12. Support for alternate area "What's New". Some areas have their own What's New menu, such as the Central Pacific region.
- 13. Blinking Focus: In Configuration, Options, Environment, there is a new check box called Blinking Focus. This allows you to turn off the new blinking focus we've added. What's a blinking focus? If you touch a button, say in Catalog view, it's easy to forget that the focus is now on that button rather than the editing area of the catalog dialog. The blinking focus provides a much more obvious reminder where the focus is currently.
- 14. Database robustness: faster database access as well as better data integrity assurance routines have been added.
- 15. Easy to use Windows self-extractor: we've changed from a DOS self-extracting EXE file to a Windows self-extractor program. The new self-extraction program is much smarter, and very easy to use, thereby making the upgrade to v1.5 painless and simple.

NavCis is available in the Dvorak Forum on Compuserve. Type: GO DVORAK

>	CD7 CD-ROM STR	InfoFile	FAST	Seven	Disc	CD-ROM

CD7 CD-ROM
======
Minichanger

Seven Disc CD-ROM Automatic Loader System

Mountain's new CD7 CD-ROM Minichanger is designed to increase productivity for high-volume CD users. The CD7 keeps up to seven discs on-line, which virtually eliminates the disc swapping you do every time you change applications with a traditional single-disc drive. And Mountain's CD7 won't keep you waiting, because any one of the seven discs can be loaded in just five seconds.

Mountain's CD7 also allows you to keep multiple CD-ROM applications open, because the CD7 will manage the disc swaps for you. In addition, adding a new disc to your stack is quick and simple with the CD7's push-button loading. You don't need to grapple with caddies or cartridges to load; just drop a disc in the tray and the CD7 does the rest.

The CD7's integrated DOS and Windows software automatically manages disc selection, so you don't have to remember where a particular CD is located. Mountain's innovative software uses standard system calls to determine which CD to load for each application, and automatically loads the correct one every time you launch the program.

Mountain's CD7 has all the features of expensive CD changer systems at a fraction of the cost. It manages up to seven discs -- more than any other system in its price range! In fact, the CD7 is so affordable, it actually costs less than many single-disc drives. Abundant features and low price make the CD7 perfect for both sophisticated users seeking upgrades as well as novices buying their first CD-ROM drive.

Features	Benefits
Manages up to seven discs	Keeps almost 5GB of data on-line and loads the Correct disc when you launch each application
Changes discs in less than 5 seconds	Allows quick access to your data
Simple push-button loading	No hassle loading magazines or disc caddies
Automatically selects the correct disc	You can access multiple discs without keeping track of slots or using a loader menu each time
Rugged 2X CD-ROM drive	Provides reliable high speed access to your data at twice the speed of Standard CD-ROM drives
Stereo headphone and RCA-type jacks	Allows use of Audio CDs for creation of multimedia programs and entertainment

High Performance Double Speed Drive Mountain's CD7 uses a rugged double-speed 300KB drive with an average access time of 380ms. Twice the speed of standard CD-ROM players, the CD7 is perfect for demanding applications like multimedia, games, and desktop publishing.

Audio CD compatibility lets you integrate music into your presentations, or simply listen to your favorite artist while you work. The CD7 is also

compatible with multisession Photo CDs, so you can view your personal photographs or access stock photo libraries for desktop publishing.

# Simple Installation

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Because the CD7 connects to your computer through a standard SCSI port, installation couldn't be easier. Most users who already own a CD-ROM drive can use their existing SCSI controller for the CD7 and keep their single-disc drive as well. Mountain also designed the CD7 with a selection switch to provide either SCSI or SCSI II compatibility.

Mountain's CD7 Minichanger includes the external drive, power supply cord, installation and operations manual, integrated software and user's guide, and comes with a one year warranty.

# Mountain CD7

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P/N: 01-37080-01 Includes:

External CD Changer

Power Cable

Installation and Operations Manual

Integrated Drive Software and User's Guide

One year warranty

System Requirements

IBM PC/AT or compatible computer

MS-DOS version 6.0 or higher

512KB of conventional memory

SCSI host adapter supporting the ASPI standard

SCSI interface cable with a SCSI I D-type connector

# SPECIFICATIONS

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CD7 CD-ROM Minichanger

Number of discs supported

Up to 7

Compatible disc standards

CD-ROM

CD-DA

CD-ROM XA

Photo CD (multisession)

User data per block

2048 (mode 1)

2336 (mode 2)

# Audio outputs

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Front panel - Stereo mini phone jack (headphone output) Rear panel - RCA-type phono jacks (line output)

#### Interface

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Switch selectable for either SCS I or SCSI II SCSI I 50-pin D-type connector

#### PERFORMANCE CHARACTERISTICS

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Data transfer rate 300KB/s (sustained double speed) 1500KB/s (burst)

Average access time

\_\_\_\_\_

380 ms

Disc rotation speed

\_\_\_\_\_

1061 - 411 rpm

Disc change time

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5 seconds

Buffer memory

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65 KB / 256KB (optional)

Reliability read error rate

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10-12 bytes (mode 1)

10-9 bytes (mode 2)

#### Power Requirements

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110-130V~ 60hz 0.12A

210-240V~ 50hz 0.06A

# ENVIRONMENTAL

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Operating temperature +5 degrees to +50 degrees C

Operating relative humidity 4% to 85% (non-condensing)

# PHYSICAL DIMENSIONS

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CD Subsystem (WxLxH in./cm)

 $7.8 \times 12.6 \times 3.7 / 19.5 \times 32.0 \times 9.5$ 

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11.7 x 16.7 x 9.1 / 29.8 x 42.4 x 23.0

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> What IS 32 Bit? STR FOCUS!

UNDERSTANDING 32 BIT FILE & DISK ACCESS

With the recent release of Windows for Workgroups there has been a great deal of confusion regarding the wonderful phrases "32-bit file access" and "32-bit disk access". 32-bit disk access has been with us since Windows 3.1 while 32-bit file access is new with WFW 3.11. Many users find that they are not precisely sure what it is that these types of access actually do, but they sound like something they should have. After all, many of the great advances of the past years stem from the change from 8-bit computers (8086) to 16-bit (80286 AT class) to 32-bit microprocessors (80386 and above, to include the Pentium superscalar 32 bit technology). It would seem only fitting, therefore, that 32-bit anything must be good. The proper response, as with so many other things in computing, is "maybe".

It is worth remembering that even the now despised 8086 class machines were, in reality, 16 bit processors internally. They interfaced with the computer's bus structure through an 8-bit aperture, as it were, in order to make the machine itself more affordable. Those were the days when a 16 bit card (as in modem, video card, etc.) were shockingly more expensive than their 8 bit counterpart. This meant the microprocessor (with 16 bits) could address any number (in memory, say) from hex 0 to hex FFFF or 65,535 in decimal notation (computer types call this 64k).

This was not a great deal of memory, even in the early 1980s. By using a segmented addressing scheme the microprocessor could be made to address any number from 0 to F:FFFF or 0 through F 64k page frames (where 0 is decimal 0 and F is decimal 16). This is 1,048,575 to normal persons, 1 Meg to the computer afflicted. This addressing scheme, incidentally, is the reason for the 640k limit to DOS's conventional memory (0 through 9 page frames conventional memory, frames A through F reserved for adapter and system BIOS). By the way, because the limit is imposed by the logic of hexadecimal mathematics buying more hardware memory does nothing to lift the limit and is an unfortunate source of confusion at times.

At any rate, simply addressing a single memory location with an 8086 involved a high degree of situational awareness. Whenever you are running your 32-bit microprocessor in 8086 compatible mode (Real mode), as you are whenever you are running DOS, it is jumping through these funny loops.

Beginning with the 80286 class machines it became possible to address far more memory directly (a "flat" or non-segmented memory model) but it was done in Protected mode. The 80386 processors added more flexibility to how protected mode programming could be accomplished as well as increasing the addressable memory space. This is what your high-speed processor is doing whenever you are running in Window's 386-Enhanced mode, as well as why Virtual Memory in Windows can be so much larger than your actual RAM memory (Windows is swapping the less-likely-to-be-addressed sections of code out to disk at this time).

#### 32 Bit Disk Access ---

What benefits does 32 bit disk access provide? There are a couple of benefits. If you are running DOS based applications through Windows you will notice a slight performance increase. This may not be as much of an increase as actually running your DOS based application in DOS.

The largest benefit will be for those people running multiple Windows applications concurrently. 32 bit disk speeds up the paging to and from your swapfile. If you only run 2 or 3 applications at a time you may not notice any difference in switching since your background applications will be in memory and will not have been swapped to your swapfile.

But, if you have a lot of applications running at the same time you will be able to switch from your current application to a background application faster if you have 32 bit disk access. The program will not run any faster, but you can switch to it faster. Performance is improved only for those who must do a lot of switching between multiple applications.

Where things begin to get sticky is when Windows has to access disk and file structures through (Real mode) DOS while it is doing Protected mode stunts. There is a great deal of transposition between a Virtual Memory direct address and an appropriate segmented address that DOS can grab on to (and then write to disk). Taking the time to do this can impose significant performance hits on your machine. The workaround is to substitute special protected mode-aware drivers for both the disk BIOS (32-bit disk access) and the file allocation table and disk caching scheme (32-file access). Because "Protected Mode Virtual Device Driver" is rather a clumsy term the marketing folks substituted the far more sexy "32-bit X" nomenclature.

So it's good, right? Well, as it turns out, not every disk BIOS is the same. When Microsoft wrote the 32-bit disk access driver they assumed that it would substitute for a Western Digital 1003 IDE drive controller's BIOS (or, for that matter, the old ST-506 controller). As you can imagine, inserting a device driver in the place of the BIOS code can be risky. If the hard drive is not properly accessed by the driver, data loss can result. So Microsoft built in several different safety checks into the WDCTRL driver to ensure that data transfer would remain reliable.

One of the things it checks is to make sure that the hard drive controller is WD1003 compatible. The 32 bit disk access standards are based on a WD1003 standard with no more than 1023 cylinders. Another thing that is checked is to see that the INT13 BIOS code has not been modified. When loading the Fast disk driver, it will write to and read from the drive to ensure reliable data transfers. If your disk's BIOS isn't 1003 (or ST-506) register-compatible, i.e. if it isn't a conventional IDE (like a "big" IDE drive, one with more than 1023 cylinders) or RLL/MFM drive,

this driver doesn't do you much good, since it will not load. In fact, forcing 32-bit disk access in these circumstances can degrade your system performance by forcing Windows to spend its time trying to work this out.

SCSI drives interface through their own drivers (ASPI.SYS, in most cases), which are optimized for them. The same goes for certain local-bus aware big IDE drives such as the WD2540 (540meg), WD2700 (730meg), or the WD31000 (1gig) drives. You can run disk access with the system set to autoconfigured and the cylinders reading to more than 1023 \*BUT\* you need the FASTDISK (WDCDRV version 2.3 or 2.5) driver available from the Gateway BBS (1-800-846-7562), or from Western Digital's BBS. The instructions for installing this driver should be contained in the readme files.

Please remember, the 32 bit Disk access \_driver\_ does not give you a 32 bit data path to move data on. The drive remains a 16 bit device. The driver only gives you 32 bit code vs 16 bit BIOS code for accessing your Windows swapfile.

Potential 32 bit disk access problems
-----[Big drives, but no 32bit disk access driver]

What do you do if you don't have a system which has the LBA settings in the BIOS, and you have a 540 meg drive? You have to lose some of the hard drive space to set the drive to the parameters the operating system can work with.

Here are the steps to follow:

- 1) Backup all of the information on your hard drive.
- 2) Get into the BIOS on booting and go to the hard drive setup.
- 3) Change the hard drive from Auto Config to User Defined and use the following parameters:

Cylinders - 1023 Heads - 16 Sectors -63

- 4) Save these settings and boot onto the first DOS disk. Press F3 twice to exit the setup program.
- 5) Type FDISK to repartition the drive to the new parameters. You have to delete the original partition, then recreate it with the new settings.
- 6) When this is done, press Escape to reboot the system and load DOS on it. Have the software format the drive for you automatically.
- 7) When the format is complete, reload your backup software, then restore your system.

[540, 730, 1gig, or larger IDE drives]

If you get the error "WDCTRL validation failed at phase 07,FF", this indicates you are trying to use the WDCTRL driver that is included with Windows on a drive that has more than 1023 cylinders. The fix for this is to get a driver that supports drives with more than 1023 Cylinders. If you

have a Western Digital drive, you can get the WDCDRV driver (FASTDISK) from most all the online services. If you have a other makes of "big" drive, you will need to contact the manufacture of the drive to see if they have written a 32 bit disk access driver.

The WDCDRV driver will not mount on any drives located on the secondary controller. Western Digital, the authors of the driver, believe that the secondary controller will be mainly used by IDE CD-ROM's and IDE TBU's, devices which can not utilize the driver anyway and would cause the driver to not load. So to avoid conflicts, they just prevented the driver from using the secondary controller. The only work around, should you have 3 hard drives, is to put the "Big" drives on the Primary controller, and use the smaller drives on the secondary controller. If all of your hard drives have a cylinder settings of more than 1023, the drives on the secondary controller must forego 32 bit disk access.

For GateWay Machines....

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[P4D- Saturn II motherboard: BIOS ver 4.03]

On the P4D machines with Saturn II motherboard's, the "paddle board", as it is referred to, is used for the hard drive interface in lieu of the integrated controller, such as those used on the JX-30 and P5 motherboards. It will function as a plain IDE controller, when \*not\* loading the DTC2130 or the DOSEIDE device driver (depending on the particular version of the paddle board you have). But when you do load that driver, the INT13 BIOS code becomes modified (hooked), the safety check fails, the WDCTRL driver will not load, and you do not have 32 bit Disk access enabled. To resolve this, you can remark out the PCI driver in the Config.sys file or you can not load the 32-bit Disk Access driver. There is no other option, because of the 32 bit disk access safety checks.

[P4D- Aries motherboard: BIOS ver 4.04]

Should your P4D machine have the Aries motherboard, you will not have the paddle board mentioned above, but the motherboard features the CMD hard drive controller chipset integrated onto the motherboard. This chipset is noted for improved transfer rates between the hard drive and the processor, with one caveat: it requires drivers to take advantage of this speed. As we have discussed previously, these drivers will hook INT 13, thus effectively disabling 32 bit disk access. Things are not as bad as they might seem, because the good people at CMD have taken the time to write some drivers equivalent to the 32 bit disk access drivers. When the CMD drivers are loaded in the Config.sys file, the protected mode drivers are enabled, thus giving you "32 bit disk access" even though the "magic check box" does not indicate 32 bit disk access is enabled.

There is the possibility that the drivers have been removed, or are not present, in which case you will need to copy the files  ${\tt cmd640x.386}$  &  ${\tt cmdint13.386}$  [from the CMD disk] to the Windows directory. Now make the necessary changes below in the [386Enh] section by adding and/or remarking out the following lines:

[386Enh]
rem DEVICE=IOS.386
VIRTUALHDIRQ=OFF
rem DEVICE=VXDLDR.386

OVERLAPPED=TRUE
rem DEVICE=\*INT13
DEVICE=CMD640X.386
rem DEVICE=\*WDCTRL [if present]
DEVICE=CMDINT13.386
32BITDISKACCESS=ON
DEVICE=\*BLOCKDEV

One thing to be aware of, if you use the "green" features of the system, the CMD drivers have been found to conflict with the ^·hard disk^¶ power management feature. You may still use the Windows CMD driver [with power management enabled] providing that the hard disk is permitted to spin-up fully prior to launching any applications.

If an application is launched while the hard disk is in the process of spinning-up, then cmdint13.386 will fail to detect the hard disk controller and an error message will appear. If you allows a 3 sec delay before the hard disk is accessed then the ^·error message^¶ will not be displayed, and you should have no problems.

## [IDE CD-ROMs]

If you have the NEC 2x, or the Mitsumi 4x IDE CD drive in your system and it is installed on the same controller as your hard drive, you cannot enable 32-bit Disk Access. This is because the file structures for the CD won't support the writing to the drive, so it fails one of the 32 bit disk access compatibility tests. If you have a Pentium system with two controllers, make sure you have the most updated CD drivers and connected to the CD to the ISA controller. Leave the hard drive connected to the PCI controller. You will have to change the CD driver line to show its movement from the primary to the secondary controller in hte Config.sys driver line. Please consult your cd-rom manual for the specific changes needed. With this setup, you can enable 32-bit Disk Access.

# [INT 13 hooking drivers]

Something to watch for when trying to figure out why 32 bit disk access is failing, is any device driver that hooks INT13h will cause 32 bit disk access to fail. Some Novell drivers, caching controller drivers, or other misc. drivers might be causing the Fast Disk driver to fail to load because they are "hooking" INT13.

# [None of the above]

If all of the above criteria is being met, the problem could be that there are some lines missing from the [386ENH] section of the SYSTEM.INI file. The lines to look for are:

32bitdiskaccess=on device=\*blockdev

device=\*pagefile
device=\*int13
device=\*wdctrl

Some common error messages and solutions. Courtesy of RJ Smith, Western Digital Corporation ---

[WDCDRV can not load due to conflict with another virtual device]

Probable Cause:

1. The line

device=\*int13

is probably missing from the [386Enh] section of SYSTEM.INI.

- 2. There is another VxD (Virtual Device Driver) loaded through the [386Enh] section of SYSTEM.INI. This is probably the SYMEVNT.386 driver from the Norton Desktop for Windows or the Norton Utilities v8.0. This driver must be removed for 32-bit disk access to load.
- 3. The CMD Windows VxD CMD640x.386 or the CMD DOS TSR driver CMD640x.SYS is loaded. If using these two drivers. WDCDRV.386 is redundant and should not be loaded. This is seen on the Gateway BATIP-3 Anigma 486 PCI motherboard. These drivers provide EIDE functionality and 32-bit Disk Access.

Action:

1. Insert the line

device=\*int13

in the [386Enh] section of SYSTEM.INI.

- 2. Remove the SYMEVNT.386 driver from SYSTEM.INI file. Or contact Symantec for an updated version of this driver.
- 3. Try to identify other recently installed VxDs or other device drivers that attempt to program the hard disk controller I/O ports directly. Remove them if you want to continue using WDCDRV.386.

#### Background:

------

The WDCTRL driver was unable to register itself to Windows 3.1 as a device driver, or it wasn't able to take over exclusive control of the I/O ports used by the hard disk controller. At this point, the controller has passed compatibility tests but software initialization of the control parameters hasn't been done yet. Some other VxD has already registered with the same VxD ID as WDCTRL or has already taken over the I/O port addresses that WDCTRL wants to take over. This can happen if you try to load WDCTRL more than once, or a vendor-supplied VxD wants to reserve the same I/O addresses or uses the same VxD ID as WDCTRL. Microsoft registers all VxD IDs to try to prevent these conflicts. The proper action is to identify recently installed VxDs or other device drivers that attempt to program the hard-disk controller

 $\ensuremath{\text{I/O}}$  ports directly and  $\ensuremath{\text{remove}}$  them if you want to continue using FastDisk.

[WDCDRV can not load. Unrecognized disk software installed.]

#### Probable Cause:

- 1. The most probable cause is STEALTH mode in QEMM v7.0x.
- 2. This error can also mean that a DOS device driver has hooked the ROM BIOS Int 13h incorrectly. WDCDRV checks for correct hooking of the interrupt by looking at the address of the interrupt handler. If it is not in conventional memory, and WDCDRV is loading, WDCDRV considers the address incorrect. Begin removing device drivers that hook Int 13h until you can successfully enable FastDisk. These device drivers can be identified by most diagnostic programs. If you still have problems, verify that all device drivers that hook Int 13h are up to date and follow Microsoft's guidelines for hooking disk interrupts.

NOTE: WDCDRV checks the BIOS Int 13h interrupt vector value to see if it is "acceptable". It broadcasts an Int 2Fh that asks DOS Int 13h hookers if they are "BLOCKDEV Aware". If they are aware of BlockDev and want fastdisk drivers to load then they will return 0 in CX.

#### Action:

- 1. Removing the command line option ST:M (or possibly ST:F) from the QEMM command line will disable STEALTH completely. The customer can also use the command line options XSTI=13 x=ssss-nnnn, where ssss is the segment address of the Int 13h handler and nnnn is the offset address. Information on obtaining the correct numbers for ssss and nnnn are contained in the file XSTI.TEC on the Quarterdeck BBS and on their Compuserve forum.
- 2. Run FINDHOOK.COM (available in Lib 1 of IBMHW on Compuserve in the compressed file FHOOK.COM) to identify the software hooking Int 13h. Determine if this software is critical to proper system operation. If it is not, remove it. If it is critical, do not use 32-bit disk access.

[WDCDRV Validation Failed At Phase 01,00]

# Probable Cause:

- 1. The values returned by Int 13h Function 8h (Read Drive Parameters) do not match the values stored in the Drive Parameter Table or Enhanced Drive Parameter Table pointed to by Int 41h (drive C:) or Int 46h (Drive D:). This can happen if the STEALTH feature of QEMM v6.0 and above relocates the DPT or EDPT to protected mode memory. Since the FastDisk device is in its initialization phase and running in real mode, it cannot access the DPT or EDPT and cannot verify the values contained therein match the BIOS Int 13h Function 8h values.
- 2. The BIOS is operating the drive in LBA (Logical Block Addressing) mode but has not built a valid Enhanced Drive Parameter Table. Either the signature is invalid (does not conform to the Axh pattern) or the checksum is invalid.

Action:

-----

- 1. Removing the command line option ST:M (or ST:F) from the QEMM command line will disable STEALTH completely. Customer can also use the command line options XSTI=13 x=ssss-nnnn, where ssss is the segment address of the Int 13h handler and nnnn is the offset address. Information on the correct numbers for ssss and nnnn are found in the file XSTI.TEC on the Quarterdeck BBS or their Compuserve forum. These options prevent Stealth from relocating the Drive Parameter Tables and the Int 13h handler.
- 2. Run WDTBLCHK.EXE to determine if the BIOS is operating the drive in LBA mode and whether it has created a valid EDPT. If there is no valid Enhanced Drive Parameter Table, WDCDRV cannot determine the translation mode and therefore cannot load. A BIOS upgrade is necessary in this case.

[This program tried to access your hard disk in a way that is incompatible with the Windows 32-bit disk access feature (WDCTRL). This may cause your system to become unstable.]

#### Probable Cause:

A device driver, TSR, or application tried to access the hard-disk controller ports directly while WDCDRV was loaded. WDCDRV returns an error code without performing the operation. This is probably a Virus Checker writing directly to the drive. This also occurs with the DOS UNDELETE program when run from a DOS window.

#### Action:

\_\_\_\_\_

Find the application or device driver that attempted to program the hard-disk controller ports directly. If you discover that the offending application or device is essential to the operation of your system, your only alternative is to disable FastDisk. Disable the 32-bit disk access checkbox in the Change Virtual Memory Settings dialog in the 386 Enhanced section of the Control Panel.

[WDCDRV Validation Failed at Phase 09,1F]

Probable Cause:

You attempted to use WDCDRV.386 in a system with no Western Digital high capacity drive installed. WDCDRV.386 will only load if there is at least one Western Digital drive in the system.

# Action:

\_\_\_\_

1. Remove the line

device=WDCDRV.386

from the [368Enh] section of SYSTEM.INI.

2. Install a Western Digital drive.

[Application Error: Control Caused a Load Segment Failure in module

#### Probable Cause:

\_\_\_\_\_

WDCDRV.386 has a Block Count set which is greater than 0 and Windows For Workgroups is using 32-Bit File Access which uses Scatter/Gather DMA . This only occurs under the following conditions:

Windows For Workgroups is in use 32-bit File Access is enabled WDCDRV.386 is loaded ROCKET.BIN is loaded in Config.sys

# Action:

\_\_\_\_\_

1. Run the CAVIAR.EXE program and set the WDCDRV.386 Block Count to zero (0). If the customer has the older version of CAVIAR.EXE have them insert the following line in the [WDCDRV] section of SYSTEM.INI:

#### BLOCKINGFACTOR=0

or

2. Place the command line option /W=1 ( or /W=1,1 for a two drive system) on the device=rocket.bin command line. This disables block writes in rocket.

[WDCDRV Validation Failed at Phase 0A,1F]

#### Probable Cause:

The BIOS has built an invalid Enhanced Drive Parameter Table.

# Action:

- 1. Run WDTBLCHK to verify that there is an invalid/no Enhanced Drive Parameter Table.
- 2. Inform customer that a BIOS upgrade is necessary.

[None. Windows For Workgroups locks up after the customer exits Windows For Workgroups and then restarts it.]

#### Probable Cause:

Customer is running WFWG on top of Novell Netware 3.12 and using the Microsoft supplied ODI support layer VxD MSODISUP.386 (in the [386Enh] section of SYSTEM.INI. WDCDRV.386 v2.5 is incompatible with the Microsoft supplied ODI support driver MSODISUP.386.

# Action:

- 1. Disable WDCDRV.386. This allows network drivers to load.
- 2. Start WFWG with the /N command line option. This prevents the network drivers from loading and allows 32-bit Disk Access but no network access.

[None. Windows For Workgroups locks up when the customer starts Windows.]

#### Probable Cause:

Customer is running WDCDRV with DMA transfers set to "Auto-Detect" and the motherboard PCI-EIDE chipset does not properly implement DMA transfers.

#### Action:

- 1. Start Windows with the command line option /D:F to prevent WDCDRV.386 from loading.
- 2. Run CAVIAR.EXE and disable DMA transfers and Scatter/Gather DMA.

[Fatal Error #2 - Turn Off Your Computer Now!]

#### Probable Cause:

Customer machine has a Phoenix BIOS v4.03 dated prior to July 1994 (7/94). This BIOS does not build a valid Enhanced Drive Parameter Table yet it performs LBA translations.

#### Action:

- 1. Start Windows with the command line option /D:F to prevent WDCDRV.386 from loading.
- 2. Disable WDCDRV.386.
- 3. Advise the customer that a BIOS upgrade is required from the motherboard/system OEM. One is available from Phoenix, but only to the OEM.

[WDCDRV Validation Failed at Phase 0A,1F. Page 7]

# Probable Cause:

- 1. Disk Manager is being used in a system which auto-detects the drive's correct CHS geometry and which supports the drive at full capacity.
- 2. The drive is attached to a caching controller

# Action:

- 1. Remove Disk Manager. It is not needed.
- 2. Disconnect the drive from the caching controller or do not use  $\mbox{WDCDRV.386}$

32-bit file access is probably the more confusing issue. With the release of WFW 3.11 came a number of protected mode enhancements that Microsoft refers to as the "Installable File System". (Thus the title of the IFSHLP.SYS driver that is installed in your CONFIG.SYS file - more on this later.) The basic idea behind all these services is the same - to make writing information to and from system devices more efficient by obviating DOS's inherent file handling processes.

Besides "32-bit file access" (Virtual File Allocation Table services or VFAT) there is VCACHE, which does more or less the same job that SmartDrv does, only in protected mode, and VREDIR, the protected mode network redirector.

All of these new services (the "Installable File System" family) are driven by the IFSMGR driver that is loaded by WFW 3.11. It is necessary to have the IFSHLP.SYS driver loaded in your CONFIG.SYS in order for IFSMGR to bind itself into DOS's existing file system. Thus we have second mode of failure for the IFS - you must have the IFSHLP.SYS running in order to enable "32-bit file access" (or any other part of the IFS family).

Because the VCACHE driver takes over SmartDrv functions for the hard drive when it is running (whenever you are in Windows for Workgroups) SmartDrv is effectively disabled whenever you have 32-bit file access enabled. It still has a role when you are running real mode DOS, and for floppies and CD-ROMS.

Potential 32 bit file access problems --

All of these 32 bit file access expansions build on the WDCTRL device driver that handles protected mode disk access and so will not be available if you attempt to, but cannot enable "32 bit disk access". If you leave 32 bit disk access disabled, you shouldn't have a problem. This is the first mode of failure and acompanying workaround for getting "32-bit FILE access".

There are, of course, other interesting things that can kill off the IFS. Curiously, one of these is disk compression in the form of DOS 6.0 DoubleSpace. You cannot use 32-bit file access if you are running DOS 6.0 DoubleSpace partially because of the extra processing overhead involved in running disk compression schemes and partially because VCACHE cannot reliably estimate the true amount of space available on a compressed drive (the available space reported is only an estimate based on how compressible likely data will turn out to be). Version 6.2 DoubleSpace does accommodate the IFS.

It has been seen that Norton Desktop can cause 32 bit file access to fail to load, as can loading a NOEMM driver with PCTools for Windows. Both Norton and PCTools offer some sort of patch to allow 32 bit file access to be enabled with their shells.

The QUALITY line in the Autoexec.bat file can also cause problems loading 32 bit file access.

Intel's line of "SatisFaxtion" modems, because of the drivers they use, will prevent 32 bit file access from loading.

An interesting trade off with the VFAT is that you cannot run Undelete with it (it has replaced the FAT structure that DOS normally uses). Another way to disrupt the VFAT is to when a DOS program hasn't

properly closed files in use before Windows starts. Under these conditions the VFAT will not load but SmartDrv is disabled anyway. The result is very slow system performance.

Another part of the IFS family is VCOMM.386. This is, as you might have guessed, the protected mode communications driver. Applications that install their own replacements for Window's COMM.DRV driver have the potential to disrupt the IFS stack and thus make it impossible to get "32-bit file access". Examples are fax packages that substitute their own driver for COMM.DRV (e.g. WinFax). A related anomaly occurs with any of Intel's CAS modems (notably the SatisFaxtion series). There tends to be timing conflicts with the CAS drivers that effectively disable 32-bit file access. Workarounds exist but there continue to be problems with this particular software/ hardware combination.

On a more theoretical basis, all of these issues arise as a matter of running "advanced" services on top of a operating system architecture (DOS) that must accommodate everything back to the original 8088 processors. In some ways Window for Workgroups 3.11 represents a sort of halfway house to Windows 4.0. We most likely have not seen the last of these structures.

NOTE: I have decided to add this to the standard file, the following is part of a posting from another customer describing how he got 32 bit access working using the latest WDCDRV driver from Western Digital.

- 1. I first copied wdcdrv.386 dated 22.06.94 into the WINDOWS directory to replace the old file dated 16.02.94 put there by my previous experimenting with WIN31.
- 2. In DOS, I opened SYSTEM.INI and did the following changes in the  $[386 \, \mathrm{Enh}]$  section:

;[REM]device=\*wdctrl

32BitDiskAccess=off

device=\*int13 device=c:\windows\wdcdrv.386

- 3. I then erased all entries in the [wdcdrv] section, leaving just the section name intact.
- $4.\ \mbox{I}$  then fired-up WfW and ran CAVIAR, telling it to sense everything automatically.
- 5. Next the usual bit with the CONTROL PANEL virtual memory setting, selecting 32bits file access, and following the procedures of restarting windows.

It worked for me, so it should work for others as well.

# IMPORTANT NOTE!!!!!!!!

The WDCDRV.386 driver mentioned above is available in the MSWFWG forum under the 32-Bit Access section. I hope this helps in your quest for 32 bit access.

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for ALL GENIE users!

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ROCHESTER, N.Y. and SOQUEL, CA., January 17 -- Eastman Kodak Company and Live Picture, Inc. (formerly FITS Imaging) today signed a broad technology and product development agreement covering a range of imaging applications.

As part of the agreement, Kodak obtains a license to apply Live Picture's new and advanced resolution-independent image viewing and editing technology in future Kodak digital imaging products.

The combination of the Live Picture technology and Kodak's digital imaging and color management science will make it easier to open and manipulate high quality images. In addition to requiring less computer power, this combination of capabilities will greatly enable the utilization of images on computer networks and common carriers. For example, users

will be able to utilize regular telephone lines in the process of retrieval, manipulation and transmission of high quality images.

Live Picture's technology will also provide a strong complement to future Kodak imaging products, offering users of digital images the ability to efficiently manipulate a digital image faster and with less computing power than with other software. Images can be opened and displayed in seconds. Subsequent cropping, zooming, panning, and geometric transformation can be accomplished with similar speed. This

capability will be provided all the way from the sophisticated graphics arts user to the desktop user in the home.

"Later this year, when this new technology has been incorporated into Photo CD applications, many more PC users with lower levels of random access memory (RAM) will be able to manipulate high resolution images," said Carl Gustin, vice president and general manager of Kodak's Digital and Applied Imaging business. "And those images will be available for immediate printing or inclusion in compound documents with little or no delay.

"Photo CD technology will provide an even more potent bridge to digital imaging and it will continue to be easily available through local photo processors and other service providers," Gustin added. "With this and other steps we intend to take, Photo CD will gain new power and utility.

"Kodak and Live Picture will pursue an open licensing strategy as products emerge from the alliance. Initially, software developer kits will be available, as well as libraries that can be included in popular operating systems such as Windows, Macintosh, UNIX, etc.

Live Picture president Bruno Delean explained why his company is teaming up with Kodak: "Most importantly, Kodak has a profound understanding of our technology and the speed and quality advantages that it offers the customer. Incorporating our technology with Photo CD and in other ways is a natural step and shows that Kodak, with its new management, is truly a leader in digital imaging.

"The combination of Kodak's market leadership and an open licensing strategy will make this the next big standard in digital imaging," Delean added. He noted that future versions of Live Picture, as well as forthcoming applications from Live Picture, will support Photo CD and the Kodak Color Management System.

The Live Picture technology is a new way of formatting and manipulating the millions of pixels -- dots of color information -- that digitally define an image. Images are stored as a sequence of subimages (from full resolution to low resolution) which are organized into discrete "tiles" or segments, making it possible to quickly access only the information needed to fill the screen and to smoothly and rapidly manipulate the image.

This formatting allows for high-quality image composing and editing. Image edits are stored separately as commands that can be updated, deleted and reordered prior to rendering the final image for printing, thus avoiding the cumulative error buildup due to independent sequential edits and the loss of speed caused by the processing of unnecessary image data.

Live Picture currently offers the new technology in the award-winning Live Picture software product, a "high end" image editing and composition system for photographers, graphic artists and other publishing professionals. The software is published by HSC Software in North America, Koyosha Graphics in Japan, and elsewhere by Live Picture, Inc.

As part of the agreement, Kodak will make an equity investment in Live Picture. The size of the investment was not disclosed.

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> Wings of Glory STR InfoFile

Computer Pilots & Dogfighting

"WINGS OF GLORY"

Takes Computer Pilots Back to Basics of Dogfighting

(AUSTIN, TX): Before laser-guided missiles, before infrared bombs, even before radio, there was still war in the sky. ORIGIN's Wings of Glory on CD-ROM, takes you back to the days of World War I, when high-tech aircraft were those that didn't shoot off their own propellers. The game is scheduled to ship in January.

Wings of Glory captures the silver-screen magic of classic films like the Blue Max and Hell's Angels. Daring young pilots took to the skies in canvas-covered aeroplanes with nothing but a machine gun and their wits. Flying for the British Royal Flying Corps, and later the Americans, you'll fly through puffy, white clouds in the open-air cockpits of five historic planes: the Sopwith Pup, Sopwith Camel, SE5a, SPAD XIII and the Fokker Dr. I. With ORIGIN's RealSpace graphics engine, you'll see unprecedented detail in the colorful but deadly planes of the German Hunter Squadrons. As your superiors recognize your skills, they'll send you on deadlier missions, taking out the so-called "sausage" observation balloons as well as behemoth zeppelins. All the while, newspaper headlines will keep you updated on the progress of the war, both the good news and the bad.

Four-channel digital sound gives you the roar of dogfighting the way WWI pilots heard it. An Instant Mission Generator lets you fly against any combination of enemies you choose. A Mission Recorder lets you save your favorite battles and watch them again from multiple camera angles. The mission files are so small, they can be traded on disk or shared with other would-be aces over online services such as CompuServe and America Online.

Current system requirements\* for Wings of Glory are:

IBM-PC, 486/50+

256-color VGA graphics

8 MB RAM

15 MB minimum hard drive space

MS-DOS 5.0 or higher

Double speed CD drive or faster

Keyboard, mouse (joystick recommended, also supports rudder pedals)
MUSIC (optional): Ad Lib, Sound Blaster, Roland SCC-1, General MIDI
MPU-401

or 100% compatible sound board

SPEECH/SOUND EFFECTS (optional): Sound Blaster

or 100% compatible sound board

\*System requirements subject to change

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

# IMPORTANT NOTICE!

STReport International OnLine Magazine is available every week for your reading pleasure on DELPHI. STReport's readers are invited to join DELPHI and become a part of an extremely friendly community of enthusiastic computer users there.

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Using a personal computer and modem, members worldwide access DELPHI services via a local phone call

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At Password: type STREPORT and press RETURN.

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Advantage Members have always enjoyed the lowest DELPHI access rates available. On the new 20/20 Advantage Plan, members receive their first 20 hours of access each month for only \$20. If you happen to meet someone OnLine or find some other diversion, don't worry because additional usage is only \$1.80 per hour.

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\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

>	From the Atari	Editor's Desi	2	"Saying	it	like	it	is!
			"					

Well, the phones are back online again - only four days to fix them this time....sigh. It seems a few of us on the Atari staff had similar problems last week.

We've got some interesting information this week. Personally, I don't have a lot to say this week; so why not turn the heat up a notch (those of us who have a real winter!) and enjoy the reading!

Until next time...

> In The News! STR InfoFile!

-/- Team Warns of New Internet Threat -/-

Computer watchdogs are warning that online vandals have come up with a new trick to break into systems linked to the Internet, saying intruders could copy or destroy documents or even work undetected by masquerading as an authorized user.

Officials of the government-backed Computer Emergency Response Team are expected this week to outline ways to prevent the intrusions, according to a report in The New York Times this morning.

The Associated Press says the first known attack using the new technique, known as "Internet protocol spoofing," was on Dec. 25 against the computer of computer security expert Tsutomu Shimomura at the San Diego Supercomputer Center. Shimomura told The Times the intruder took over his computer for more than a day and electronically stole a large number of security programs.

"Several attacks have been reported since then, but the exact number is unknown," AP says.

CERT officials at Carnegie-Mellon University in Pittsburgh say the new assaults are a warning that better security precautions must be taken before businesses dive into the Internet.

"Essentially everyone is vulnerable," said James Settle, a former FBI computer crime expert who is now an executive at the Inet Corp., a computer security firm.

AP says, "The intruders fool computers into believing that a message is coming from a trusted source. By posing as a familiar computer, an attacker can get access to protected computer resources and seize control of what was considered a well-guarded system."

The wire service adds classified government computer systems are not thought to be at risk because they are not directly connected to the Internet, but that many of the new business systems on the Internet might be targeted.

The Times says CERT will post a security warning today that will include a list of brands of computers that can use a program to guard against the intrusion method.

Meanwhile, the Reuter News Service says "Internet spoofing" can be compared "to finding that master keys to all the front doors in the neighborhood have fallen into the hands of burglars."

The technique "made use of a flaw in the Internet design to fool router computers into believing a message is coming from a trustworthy source," Reuters says. "By masking its data as coming from a familiar computer the illegal hackers can gain access to protected computer resources and penetrate the system."

#### -/- CERT Posts Internet Warnings -/-

Following up on its promise, the government-backed Computer Emergency Response Team has posted its advisory about the latest threats to security on the Internet.

As reported yesterday, CERT says online vandals are using a trick called "Internet protocol spoofing" that enables them to break into linked systems, copy or destroy documents or work undetected by masquerading as an authorized user.

CERT officials now add Internet users may be able to detect if security has been breached on the host computer they're logged in on. Two signs of possible trouble are if commands that users didn't type start appearing on their screens, or if a blank screen appears that no longer responds to commands.

The advisory posted on the Internet urged operators of Internet host computers to encourage users to report such activity, and to "pay particular attention to connections that have been idle for a long time."

Further information is available on the Internet at the FTP site info.cert.org, or by electronic mail addressed to cert@cert.org. The advisory urged that any sensitive information sent by electronic mail be encrypted; contact the team for details. (Enter GO INTERNET to reach CompuServe's FTP feature.)

Associated Press writer Mike Mokrzycki reports the "spoofing" isn't new, at least in theory.

"It exploits a weakness in the Unix operating system, the backbone of the Internet, that was described in an academic papers in 1985 and 1989," he writes. "The Internet breaks computer messages into digital data 'packets' with addressing information -- the protocols -- used by network computers known as routers, which deliver the data. Spoofing can fool the router into believing a message is coming from an authorized source."

The CERT advisory notes, "Intruders can use IP spoofing to gain root access for any purpose."

After "getting root," as it's sometimes called, intruders can use a "hijacking tool" to take over connections from any user on the system, CERT says.

The advisory says some types of networks already include filters that should prevent the attacks, but many others don't.

# -/- Apple Appeals to Supreme Court -/-

Apple Computer Inc. is asking the U.S. Supreme Court to review its long-running copyright suit against Microsoft Corp. and Hewlett-Packard Co., arguing lower-court rulings could sharply limit protection of software.

However, lawyers familiar with the case told reporter Don Clark of The Wall Street Journal it is a long-shot that Apple will persuade the high court to review the matter.

It was seven years ago this spring that Apple filed its original suit, contending Microsoft's Windows and HP's NewWave illegally copy the screen displays of Apple's Macintosh computer. Apple lost the first round before the U.S. District Court and then the U.S. Ninth Circuit Court of Appeals upheld the findings last September.

The Journal reports this morning Apple argues in its petition for Supreme Court review that lower court rulings:

-:- Concluded only "virtually identical" copying was illegal, where other courts have ruled against competing programs that were only

"substantially similar" to the original.

-:- Erred by dissecting the Macintosh displays to consider individual symbols or other elements, and should have considered the overall resemblance of the Macintosh to the rival programs.

Calling the dispute the "most significant copyright case of recent times" to the software industry, Apple said the lower-court rulings could open U.S. companies to foreign copying on a massive scale.

The Journal says the petition was filed Dec. 19, but was not disclosed until recently when Hewlett-Packard distributed a reply to some reporters, arguing Apple resorted to "gross mis-characterizations" of the lower-court rulings to argue that they departed from other copyright precedents.

Clark says HP argues the courts properly narrowed the case to a small number of features that weren't covered by a license that Apple had granted

to Microsoft, and said only those items must be "virtually identical" to the original.

Meanwhile, a Microsoft spokeswoman told the paper her employers is confident that the rulings will stand.

Attorney G. Gervaise Davis III of Monterey, California, has studied the case and predicted the Supreme Court won't review it, because the key issue is the license with Microsoft, not a broad issue that affects many companies.

>	Computer	Virus	Handbook!	STR	InfoFile!	-	Ultimate	Virus	Killer	Book!

THE	ULTIMATE	VIRUS	KILLER	BOOK,	by	Richard	Karsmakers	

Yes! Finally it \*will\* happen!

Over the past few years I've been writing a book called the "Ultimate Virus Killer" book, i.e. the ultimate book for those of you who are interested in the virus phenomenon - or your protection against it.

- o What to do against viruses.
- o What viruses can and can't do.
- O A history of viruses on Atari, MS-DOS, Apple and other systems.
- o Extensive virus classification described.
- o All sense and nonsense ever said about Atari viruses outlined.
- o A full and extended "Ultimate Virus Killer" manual.
- o A list of all Atari viruses and their symptoms.
- The biggest glossary you ever saw.
- A total of around 250 pages of know-how.

The book is planned to be ready by July 1st 1995, but if you order before May 1st (post mark!) you will get an interesting discount. Please refer to the ordering details, below.

IMPORTANT: THE BOOK IS ONLY AVAILABLE FOR A LIMITED PERIOD! ORDERS RECEIVED AFTER DECEMBER 31ST 1995 WILL NO LONGER BE PROCESSED!

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!11.99 to be sent as a UK cheque made out to "Mr. Karsmakers". If you order before May 1st, you will get a !2 discount, making the amount !9.99. YOUR CHEQUE WILL NOT BE CASHED IN UNTIL THE BOOK IS SENT OFF TO YOU. This should be in July 1995. If you order after August 1st 1995, please allow up to six weeks for delivery. Please \*clearly\* state your name and address and send your cheque off to the address below.

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# Important notes:

o In case of the Ultimate Virus Killer book not happening at all, your International Money Order or cheque will be

- destroyed.
  o If you have an email account and specify it upon ordering, I
   will let you know when the book is being sent off.
- o The prices include postage and packaging costs.
- o Remember: The book won't be available anymore after December 31st 1995!

> Fonts & GDOS! STR InfoFile - ALL You Ever Wanted to Know about FontGDOS!

From Compuserve:

[Editor's note: Spelling corrections and some editing done for clarity]

Sb: #FONTGDOS

Fm: HANK WEICHBRODT 73645,1756

To: 100126,2777 (X)

Simon,

I downloaded those GDOS fonts that you mentioned and they don't appear to be working with FONTGDOS. I still have not been getting any ACTIVE FONTS just INACTIVE FONTS on the Devise ID's that I use.

\* Reply: 105151

Sb: #105085-#FONTGDOS

Fm: Simon Churchill 100126,2777 To: HANK WEICHBRODT 73645,1756

Hank

\*\*\*\*\* Very LONG message save me PLEASE!!!!! \*\*\*\*\*

I'm not sure if all your message was received by CIS, it stops with an 'a' and that's it. P.S watch out for my spelling it's crap!

Anyway, just out of interest, I take it you have unpacked any files that needed unpacking (Eg ZIP's), all the fonts are in a directory say FONTS or GDOS and you have a printer(s) driver in there as well.

. . . .

Gone to play, please wait. 8-)

. . . .

Right, I have been off and had a play with FONTGDOS on my hard disk and am now back to try and give you what I have found out.

First of all there is the AUTO folder where the FONTGDOS.PRG should be, is it? Next, There are 3 Accessories. These need to be installed to set up Fontgdos correctly, one is used for setting up the main system, the other 2 are extras to adjust other things. The acc's are: FSM.ACC, FONTGDOS.ACC, and FSMPRINT.ACC.

FSM.ACC This is used for the scalable part of the FONTGDOS system and sets up the EXTENDED.SYS cache sizes. The scalable part is not used.

FONTGDOS.ACC This is the set up acc and the most important and MUST be in the root directory with the others if you want to get the system working. This sets up the ASSIGN.SYS file completely.

FSMPRINT.ACC This is to set up the FSM printer configuration, not much use to us but have it there for fun. This adjusts the printer driver .SYS files.

O.k. if they are in the root dir, the PRG is in the AUTO dir and the fonts and printer driver are in a dir. (Fonts have an extension of FNT, just so you can see if there are any in the directory you have.)

There should be no ASSIGN.SYS file and no EXTENDED.SYS file, remove them if they are present and then reset the computer, FONTGDOS.PRG will get upset and not load, this is correct, first you need the ACC's loaded. (Unless you are using the CPX's where you will use the control panel.)

Right, forget FSM.ACC for now, our first port of call is FONTGDOS.ACC. And this is where things get fun. A tip for you, click on just about every word in the window as this normally brings up an option or will enable you to change something.

Click on the 'Printer Selector' (This is FONTGDOS.ACC) from the desktop acc area so a window pops up with a lot of text on it, at the bottom is a box with the word 'OPTIONS' in it, go and click here. You will be placed at a sub screen, at the bottom of the list is a PATH, click here to set the path for the fonts and drivers.

The top option is the driver's install bit. You need to play with this but basically you should end up with No. 1-4 as Screen.sys with the option to the right set for ROM. No. 21 should be a Printer.sys with the option RES and No. 31 should be Meta.sys and the option set for RES. You may need to add the last two with the bottom section in the window.

Get that part. No, then have a play and see what it does.

Once finished click on the MENU box at the bottom right. Next is the vital font active/inactive option, that's the middle one of the three. 8-)

Once in its sub screen the top option will say 'ACTIVE FONTS', at a guess there will be none, click on the words and change it so it reads 'INACTIVE FONTS', if the PATH has been set then you should see a list of fonts with a scroll bar on the right.

Notice the No. and it's reference to the top right, you now have to set the fonts to each of these No. So for No. 1 SCREEN.SYS you would highlight (by clicking on them, Hold shift for multiple selection) and then APPEND them to that driver. You should APPEND only screen fonts to the SCREEN.SYS No.'s and Printer fonts to the PRINTER.SYS (No.21). To see what has been appended change the option to 'ACTIVE FONTS'

Once all fonts have been appended then you can click on MENU and return to the main 3 options menu area. Click on TOP MENU to return to the main menu.

At the top a small window says 'CURRENT PRINTER', if you have installed all the printer driver(s) then click here to choose the one for your printer, if you only have one then its name should be printed in the box. If the printer driver is a FSM type then it will have some details about it underneath, if it's not then you won't!

Click on SAVE to save a ASSIGN.SYS file then on exit, believe it or not that's the main part done!

If your printer driver is an FSM type (You will know because of the

extra details the previous ACC's main menu.) The you can use the 'Printer Config' in the desktop ACC's slots. All this will do is give you some options to change the paper size and the odd other item, of no real use.

O.k. it's off to the desktop ACC's slot once again and click on the FSM Manager. Click on the OPTIONS button and select the OUTLINE fonts. You should have a new menu on screen, click on the 'Set Cache' button. You will now be shown the settings for the cache system, if you have little memory then click on the down arrow to decrease the value. When you are happy with the figures, (The cache is normally slightly larger than your largest uncompressed font, EG a 36 Point printer font would be one of the biggest unless you have a bigger point size) click O.k. or exit.

Once you are back at the main menu click on save to save the EXTENDED.SYS file then you can exit.

If you want to save memory then rename all the ACC's to ACX, however the most important ACC is the FONTGDOS.ACC and should be available from the desktop ACC slot at all times.

Guess what? it's time to reset that computer again and see if the system starts with out any problems.

If it starts o.k. find an application that uses GDOS and run it. If you get fonts then it worked, if you don't then go back to FONTGDOS.ACC and check both the screen and printer fonts are set correctly. (EG they are in the ACTIVE menu and you have screen fonts for the screen and printer font's for the printer. Screen fonts should have an 'S' or 'SL' at the beginning or a XXLO.FNT for low res, XXCG.FNT for mid res and XXHI.FNT for high res at the end. Printer fonts can have just about any name so what's left is normally them!).

Well that just about wraps it up, have fun and report back on how things go.

Enjoy. 8-)
------------

Simon

> PDP Magazine! STR NewsFile! - European Atari Magazine to Debut Soon!

#### PDP Magazine

A non-profit making, paper-based, magazine for Atari ST owners - a venture run by two computer science students.

Topics covered include full page reviews (inc screenshots), mini reviews, reviews on Public Domain Libraries, graphics, comms, programming pages and a number of general computer related articles.

PDP has changed just recently, it is now bigger, covers more news and interests.

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To be added onto the mailing list, send mail to s.ticehurst@bton.ac.uk with the subject line MMsubscribe.

> Atari Developer Status! STR InfoFile - Moving Pixels Calls It Quits!

An open letter from Moving Pixel's Tony Barker, from Compuserve:

Hi all,

It's been a long time coming but I've finally decided to remove all vestiges of Atari from my life.

So I'm selling off everything I have and getting the hell out of here.

One thing I'll be doing is gathering together as much of my  $680 \times 0$  source code as I can find and uploading it here for anybody who might be interested. This will include the code to all of the official demos I did for Atari on the STE, Falcon and TT. I'll even include the full source to all of my commercial games (as long as I can find it).

One thing that concerns me is that I have one of the few (only) copies of the Tina Turner demo I did for the launch of the Falcon (what launch?) at the Boston Computer Society that caused a standing ovation. I'd kinda like to see it going to a good home, but it's a little large (~80meg). So if anyone would like it and a lot of other stuff on a fully loaded 250meg SCSI hard disk drive in an external case with power supply etc. for only \$400 Australian leave me a note in Email.

My program Art For Kids is now available for Windows and all future products from me will be on the PC. I've faced the reality of the PC phenomenon and hell, it ain't so bad. And here's my prediction for the year 2000, goodbye Apple, this PC thing is just too big and it'll cause the death of all others in competition. Unless Apple start using the PowerPC chips to make faster and faster Windows platforms they'll go the way of Amiga/Atari etc. I'm only looking in my crystal ball here, I'm just reporting what I see not what I'd like to see, so nobody jump on me for it.

Otherwise I guess it's so long and thanks for all the fish, I'm off into the real world to make some money, 8 years on the Atari, 9 commercial products and more than 30 demos (half official demos for Atari) haven't netted me anything. I sat on Atari Aus's Falcon Advisory Board (FAB), I did presentations for them, I worked stands at shows, I did staff training for them and was the place they directed most of their customer support questions, for what? A couple of free lunches? And some equipment. I wish I'd gone to the dark side (PC) much sooner, perhaps my experience will make a few of you remaining people think a little about your own situation...

The best I got from the Atari computer was the friends I made, thanks all and goodbye.

Tony Barker Moving Pixels

JAGUAR SECTION

Doom, Revisited! Iron Soldier Tips! New Jaguar Area on Genie! Updated Games List! and more!

> From the Editor's Controller - Playin' it like it is!

Since the holiday push, it's been fairly quiet on the Jaguar front. To be honest, I was expecting the flow of games to continue right into January and February, but it appears that these games have been pushed back. The WCES didn't give us anything really new in this regard, except for new titles being announced.

One can only wonder when the dry spells will narrow. The excitement that I see online which is generated with most every new title tells me that the users are chomping at the bit for more and more games to choose. And, they're getting impatient. There just aren't

enough games out there, for many, to keep the excitement going for any length of time. Where are the 3rd party titles? Without their support, it's going to be a long year for Jaguar enthusiasts.

But, we're still optimistic that the games will be coming and many of them will really blow the socks off of anything on the current market. I'm also hopeful that Atari will listen to the many online suggestions to set aside some time to put a CD together with many of the old classic games, with perhaps some "2000" versions alongside.

Let's get to the rest of the issue and see what's happening out there in the land of the cat!

Until next time...

> Jaguar Catalog STR InfoFile - What's currently available, what's coming out.

CAT #	TITLE	MSRP	DEVELOPER/PUBLISHER
Ј9000	Cybermorph	\$59.99	Atari Corp.
Ј9006	Evolution:Dino Dudes	\$49.99	Atari Corp.
J9005	Raiden	\$49.99	FABTEK, Inc/Atari Corp.
J9001	Trevor McFur/		
	Crescent Galaxy	\$49.99	Atari Corp.
J9010	Tempest 2000	\$59.95	Llamasoft/Atari Corp.
J9028	Wolfenstein 3D	\$69.95	id/Atari Corp.
JA100	Brutal Sports FtBall	\$69.95	Telegames
J9008	Alien vs. Predator	\$69.99	Rebellion/Atari Corp.
Ј9029	Doom	\$69.99	id/Atari Corp.
Ј9036	Dragon: Bruce Lee	\$59.99	Atari Corp.
J9003	Club Drive	\$59.99	Atari Corp.
Ј9007	Checkered Flag	\$69.99	Atari Corp.
J9012	Kasumi Ninja	\$69.99	Atari Corp.
J9042	Zool 2	\$59.99	Atari Corp
	Bubsy	\$49.99	Atari Corp
	Iron Soldier	\$59.99	Atari Corp
	Val D'Isere Skiing	\$59.99	Atari Corp.

CAT #	TITLE	MSRP	DEVELOPER/PUBLISHER
	CatBox	\$69.95	ICD
	Cannon Fodder	TBD	Virgin
	Hover Strike	\$59.99	Atari

CAT #	TITLE		MSRP	MANUFACTURER
J8001	Jaguar	(complete)	\$249.99	Atari Corp.

J8904	Composite Cable	\$19.95	
J8901	Controller/Joypad	\$24.95	Atari Corp.
J8905	S-Video Cable	\$19.95	
	Jaguar CD-ROM	\$149.99	Atari Corp.

> Industry News STR Game Console NewsFile - The Latest Gaming News!

-/- Electronic Arts Wraps Up Buyout -/-

Entertainment software publisher Electronic Arts of San Mateo, California, says it has completed its acquisition of Bullfrog Productions Ltd., a European interactive game developer based in Surrey, U.K.

Bullfrog becomes a wholly- owned subsidiary of Electronic Arts. Financial terms of the agreement weren't disclosed.

Bullfrog is best known for its strategy and simulation CD- ROM games, such as Populous, PowerMonger, Syndicate, Theme Park and Magic Carpet.

Bullfrog is the third major interactive software company acquired by Electronic Arts in the past three years. Origin Systems Inc., an Austin, Texas-based developer of entertainment software titles, including the Wing Commander and Ultima series, was acquired in 1992. Distinctive Software Inc. of Vancouver, Canada, developers of such EA SPORTS properties as NHL Hockey and FIFA International Soccer, was acquired in 1991.

On CompuServe, Electronic Arts is represented in the Game Publishers A Forum (GO GAMAPUB).

-/- New Jaguar Area Announced on GEnie! -/-

Type M475;1 <-- to get there

The Atari Roundtable on GEnie is proud to announce the expansion of our Jaguar area. Demand outgrew the available space so a NEW Jaguar area has now been created that will allow us to expand and grow and better meet your future needs. This area will be more organized specifically to deal with Atari's Jaguar and will subsequently have plenty more elbow room to handle the creative needs of our customers. We hope this will be to your liking.

The move will occur THIS Thursday, January 26, 1995. As a result, our Bulletin Board will be unavailable during a portion of that day. We apologize in advance for any inconvenience this may cause. We are trying to make EVERY effort to avoid having you see old messages as new which sometimes can occur during a move of this magnitude. We cannot make any promises but we will do our best to prevent this. We are, in fact, going through GREAT lengths to assure this will not happen but still, there is Murphy's Law (sigh). So, we ask that if you want to make sure you do not see any messages that were moved, as new, enter the bulletin board and type this:

SET 39 <-- Sets to the Category
IGN 1-50 <-- Ignores older messages in Topics 1 through 50

- SET 40 <-- Sets to the Category
- IGN 1-50 <-- Ignores older messages in Topics 1 through 50
- SET 43 <-- Sets to Category
- IGN 1-50 <-- Ignores older messages in Topics 1 through 50
- SET 44 <-- Sets to Category
- IGN 1-50 <-- Ignores older messages in Topics 1 through 50

You will not need to set to Category 41 or 42 as there are not yet messages in these Categories.

If you do not want to see a certain Category, log in to page 475 and enter the bulletin board by selecting option #1. Then follow these instructions:

CANcel 43 <-- If you type this, you will never again see any new messages in Category 43.

If you prefer to eliminate certain topics, without eliminating the entire Category, and want to see the new topics that are created, follow these instructions:

- SET 43 <-- Typing this will take you to the Category in which you you want to eliminate certain topics.
- IGN 1-8 PERM <-- Type this, for example, if you want to ignore topics 1 through 8 permanently or, leave the PERM off, which then allows you to simply update your pointers, eliminating the possibility of reading any old messages at that time but still allowing you to see any new messages in the future that are posted to these areas.
- \*\* PLEASE see BB.HLP file #11984 found in the software library for more detail on how you can get the most out of the bulletin board with the commands available to you.

Here's is where you will find your NEW topics. If you use Aladdin, update your topics by selecting your Roundtable menu and then selecting the "Update Topic" menu. This will go online and update all the topics that are new.

No.	Subject

From Cat 26	to	Cat 39
1 Jaguar News ~ Eve	ents ~ Games	1
2 Atari JAGUAR, 64-	-bit RISC Game Console	2
3 Future Uses, Rumo	ours, & Misc Jaguar Inf	3
13 Jaguar Advertisem	ments:Sightings,etc.	4
23 Atari Corp. & Jag	guar Press Releases	5
30 Jaguar Support		6
39 Atari Jaguar CD_F	ROM Drive	7
49 Jag Cartridge vs	Jag CD	8
29 Jaguar to Atari S	SC1224 Monitor	9
18 Cat Box		10
4 Ideas & Suggestio	ons For New Games	11
24 30-50 Games, eh?		12
5 Cybermorph		13

7 Evolution: Dine 8 Raiden 15 Tempest 2000 21 Wolfenstein 3D 31 Brutal Sports 1 16 Alien vs. Preda 48 1 User Edit-ab 27 Rainmaker Softw 20 Hi From Hand Ma 11 Videogame viole	Football ator le Games on Jaguar! ware Howdies ade Software Ltd. ence and Atari's Jaguar ndard Oxymoron?	14 15 16 17 18 19 20 39 40 41 42 43 44
From Cat 26	to 	Cat 40  2
	iing and Snowboarding atform game to own? !	3 4
From Cat 18	to	Cat 44
6 Jaguar Related 10 Jaguar vs. Otho 11 Jaguar vs 3DO, 12 Jaguar vs. 32X 14 Jaguar vs. Son	er Systems Facts and Figures	2 3 4 5 6

# A Brand New Area Separated by Game Titles:

\_\_\_\_\_

#### Category 43

No.	Subject	Ms	gs Status Author
1	Jaguar Cheats, Hints, Tips & Tricks!	2	Closed ARCHIVIST [Charlie]
2	Raiden	2	Marked DARLAH [RT~SYSOP]
3	Tempest 2000	5	Marked DARLAH [RT~SYSOP]
4	Cybermorph	3	Marked DARLAH [RT~SYSOP]
5	Alien Vs Predator	80	Marked DARLAH [RT~SYSOP]
6	Checkered Flag	3	Marked DARLAH [RT~SYSOP]
7	Doom	21	Marked DARLAH [RT~SYSOP]
8	Club Drive	2	Marked DARLAH [RT~SYSOP]
9	Kasumi Ninja	34	Marked DARLAH [RT~SYSOP]
10	Iron Soldier	11	Marked DARLAH [RT~SYSOP]
11	Zool 2	3	Marked DARLAH [RT~SYSOP]
12	Bubsy	1	Marked DARLAH [RT~SYSOP]

# These are our NEW categories:

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- 39 The Jaguar Atari's latest Game Console!
- 40 Jaguar '95 The Expansion Category
- 41 Jaguar Future Expansion Category
- 42 Jaguar Future Expansion Category
- 43 Atari Jaguar Cheats, Hints & Tips
- 44 Jaguar Flames and Debates!

It is your interest and participation that has resulted in this expansion. On behalf of the Atari Roundtable, thank you. If we can answer any questions, please don't hesitate to ask. Sending mail to us is simple as sending mail to JAGUAR\$

Sincerely

Darlah J. Potechin >Atari Roundtables

CATNIPS... Jaguar Notes from Don Thomas

As many of you know, online services such as Prodigy and America Online depend on specialized front end software as a users' interface. CompuServe and GEnie have also had user-friendly software for specific computer platforms. I have personally been using CompuServe's WinCIM with wonderful results. When I combine it with a shareware Windows Spell Check (which I did register), it works great!

I would like to pass on to everyone that I just recently received software from GEnie called "GEnie for Windows". While it lacks a couple features which I hope they place in upcoming versions such as multiple reply options for threads and macro keys, the interface is a wonderful upgrade to the old fashioned terminal approach. This combined with GEnie's announced expansion of a Jaguar-specific support, makes GEnie a wonderful way to get Jaguar support. The version is 1.2.

To access the Jaguar support areas on CompuServe, type GO JAGUAR. To access the Jaguar support areas on GEnie, type JAGUAR. Jaguar interaction is also available on Prodigy and America Online. Also get the latest issues of Atari Explorer Online, STReport, and Atari Press Releases on CATscan by dialing 209/239-1552. There are about 250 members and membership is free with legitimate registration. (Normal phone charges apply).

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Don't forget that Iron Soldier cinema-quality posters are still FREE with a prepaid \$4.95 S&H fee. Hundreds of the Alien Vs. Predator posters have been given away and many gamers have told me how they had them specially framed! The Iron Soldier posters are equally appealing and I have enough set aside for all onliners if they respond promptly. Order on CATscan 209/239-1552, sending E-Mail to:

75300,1267@CompuServe.com or ATARI@GEnie.geis.com or fax to 408/745-2088.

Also available is the Tempest 2000 Soundtrack (they're selling fast and EVERYONE who has purchased ones tells me they LOVE it!) Please ask online for others who have heard it. The ONLY complaint I have received to date is that the font is too small on the side and the user can't find it fast enough in his collection when he wants to hear it. (I swear that was the real complaint.) The Soundtrack is \$12.99 (makes great gifts).

There are still some Dealer Preview videos remaining featuring revealing clips of a lot of great existing and upcoming Jaguar software (and TV spots.) The price is \$8.95.

\$4.95 minimum S&H charges apply. 8.25% Tax in Calif., and \$2 are

# > Jaguar Developers STR InfoFile - Current Developer Lists & Titles

Game Title	Date	Game Type	MSRP	Publisher
Air Cars	1Q/95	Racing	\$59.99	Midnight Ent.
Alien vs Predator	NOW	Role Play/Adventure		Atari
Arena Football	1Q/95	Sports	TBD	V Reel
Assault	1Q/95	Action/Combat	\$59.99	Midnight Ent.
Baldy (CD)		Action/Adventure	TBD	Atari
Barkley Basketball	2Q/95	Sports	TBD	Atari
Battlemorph	1Q/95	Flying/Action	\$59.99	Atari
Battle Sphere	1Q/95	Flying/Action	TBD	4-Play
Battle Wheels	1Q/95	Racing/Combat	TBD	Beyond Games
Blue Lightning (CD)	1Q/95	Flying/Action	\$59.99	Atari
Brett Hull Hockey (CD)	2Q/95	Sports	TBD	Atari
Brutal Sports Football	NOW	Sports/Combat	\$69.99	Telegames
Bubsy	NOW	Action/Adventure	\$49.99	Atari
Burnout	2Q/95	Sports	TBD	Atari
Cannon Fodder	1Q/95	Action/Adventure	TBD	Virgin
Casino Royale		Gambling	TBD	Telegames
CD League Bowling (CD)		Sports	TBD	V Reel
Checkered Flag	NOW	Racing	\$69.99	Atari
Club Drive	NOW	Racing	\$59.99	Atari
Commando		Action/Combat	TBD	Atari
Creature Shock (CD)	1Q/95	Adventure/Sci-Fi	TBD	Atari/Virgin
Cybermorph	NOM	Flying/Action	\$59.99	Atari
Dactyl Joust	2Q/95	Action	TBD	Atari
Demolition Man (CD)	1/95	Action/Combat	\$59.99	Atari
Doom	NOM	Action/Combat	\$69.99	Atari
Double Dragon V	1Q/95	Action/Adventure	\$59.99	Williams
Dragon:Bruce Lee Story		Combat	\$59.99	Atari
Dragon's Lair (CD)	1Q/95	Adventure	TBD	Ready Soft
Dreadnought (CD)	2Q/95	Adventure	TBD	Atari
Dungeon Depths	1Q/95	Action/Adventure	\$59.99	Midnight Ent.
Evolution: Dino Dudes	NOM	Puzzle/Adventure	\$49.99	Atari
Fight For Life	1Q/95	Combat	TBD	Atari
Flashback	1Q/95	Action	TBD	US Gold
Flip Out		Puzzle	TBD	Atari
Freelancer 2120 (CD)		Adventure/Sci-Fi	TBD	Atari
Galactic Gladiators		Space/Combat	TBD	
Photosurrealism			mp.p.	m 1
Graham Gooch Cricket		Sports	TBD	Telegames
Hammerhead	00/05	Flying/Sci-Fi	TBD	Atari
Hardball Baseball	2Q/95	Sports	TBD	Atari
Highlander (CD)	1Q/95	Action/Adventure	\$59.99	Atari
Horrorscope	1Q/95	Combat	TBD	V Reel
Hover Hunter	2Q/95	Combat Action/Combat	TBD	Hyper Image
Hover Strike	1Q/95		\$59.99	Atari
Iron Soldier	NOW	Action/Strategy	\$59.99 TBD	Atari
Jack Nicklaus Golf(CD) James Pond 3	2Q/95	Sports Action/Adventure		Atari
Kasumi Ninja	NOW	Combat	TBD \$69.99	Telegames Atari
Legions of the Undead	INOM	Role Play/Adventure	TBD	Atari Atari
Off Road Rally	2Q/95	Racing Racing	TBD	TWI
OII ROAG RAIIY	40/90	Nacing	עטי	T AA T

Phear Pinball Fantasies Rage Rally Raiden Rayman Redemption (CD)	2Q/95 1Q/95 1Q/95 NOW 2Q/95	Puzzle Action Racing Action/Adventure Action/Adventure Adventure	TBD TBD TBD \$49.99 TBD TBD	Atari 21st Cent. Atari Atari UBI Soft Atari
Robinson Requiem	1Q/95	Adventure	TBD	Atari
Ruiner Pinball		Arcade	TBD	Atari
Sensible Soccer	1Q/95	Sports	TBD	Telegames
Soccer Kid	1Q/95	Sports	TBD	Ocean
Soul Star (CD)		Action/Sci-Fi	TBD	Atari
Space Ace (CD)		Space/Combat	TBD	Ready Soft
Space War 2000	1Q/95	Action/Adventure	\$59.99	Atari
Star Raiders	1Q/95	Space Simulation	TBD	Atari
Syndicate	1Q/95	Simulation	TBD	Ocean
Tempest 2000	NOW	Action/Adventure	\$59.99	Atari
Theme Park	1Q/95	Simulation	TBD	Ocean
Tiny Toon Adventures	1Q/95	Action/Adventure	\$59.99	Atari
Trevor McFur	NOW	Action/Adventure	\$49.99	Atari
Troy Aikman NFL Ftball	1Q/95	Sports	\$69.99	Williams
Ultimate Brain Games	1Q/95	Puzzle	TBD	Telegames
Ultra Vortex	1Q/95	Action/Adventure	\$69.99	Beyond Games
Val D'Isere Skiing	NOW	Sports	\$59.99	Atari
Vid Grid (CD)		Puzzle/Music Video	TBD	Atari
White Men Can't Jump	1Q/95	Sports	TBD	TriMark
Wolfenstein 3D	NOW	Combat/Action	\$59.99	Atari
Zool2	NOW	Action/Adventure	\$59.99	Atari

[Editor's note: Titles, scheduled release dates, and prices are verified from Atari and Edelman Public Relations - all subject to change]

> STReport Jaguar Game Review: "DOOM"

Atari's Jaguar gets DOOMed!

-= Available Now =Developed by: ID Software
Published by Atari
Sugg. Retail Price: \$69.99
Ease of Play: Average

You are walking down a dark corridor, your weapon sweeping back and forth across your path as you go. As you turn a corner, an Imp, a human-shaped beast with thorny protrusions at odd places on its body, bellows at you and sends a searing fire-ball in your direction. You side-step out of it's path. The fire-ball slams into the wall where just moments before you had been. You fire your handgun at the Imp once before a Zombieman comes around yet another corner and levels his shotgun at you. Before he can fire, you pump three rounds into him and hear him yell as he falls down in a bloody mess. You quickly go to the pile of smouldering hamburger and pick up his shotgun. As you do so, another Zombieman comes from around the corner and fires at you. You side-step again and the shotgun blast meant for you enters the Imp's forehead and he too moans, spurts a crimson, viscous fluid and falls to the floor. Another Imp and Zombieman appear and both fire at you. You dodge and watch as each is hit and destroyed by the other's fire. You turn to the wall and push at a discolored section. A panel slides up and reveals a hidden room. You rush inside and activate the double knife switch. You are safe... For now

A scene from a Stallone movie? Another "Arnold" flick? The latest installment of Die Hard? A really bad episode of The X Files? Nope. You have entered "DOOM", ID Software's latest first-person game for the Atari Jaguar.

#### GAME OVERVIEW

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Once available only to PC users, DOOM is set in installations on Mars, Phobos, and Deimos. You are the last true human and you must wipe out the altered humans and beasts from other dimensions that inhabit the installations. Along the way you will find health potions, medical kits, weapons, and armor to help you on your quest. Secret rooms abound and often contain these items. The objective for each level is simple: Survive! From the time you enter a level until the time you exit to the next one, you will be presented with "unfriendlies", pools of radio-active waste, barrels of toxic sludge, and countless hidden rooms and passageways. DOOM, unlike many popular video games, requires as much thought as it does reflex action, so this is not merely another shoot-em-up for over active 14 year-olds. There are no high/low kicks/punches, or tricky combination moves that must be mastered in order to do well. While speed is important, so is good reasoning ability. Opponents can often dispatch each other while trying to do you in if you can move out of the cross-fire. Bad guys can also be taken out by shooting barrels of toxic sludge. The barrels explode, taking any creatures nearby with them (this holds true for yourself as well, so take with weapons around barrels).

"Levels" range from dimly lit underground mazes to outside courtyards with volcanic mountains in the background and brilliant Martian-red skies above. Each level is not merely a re-hash of a previous level, but a unique experience with its own dimensions, demons, perils, and secrets. Simply completing a level does not necessarily mean that all of the secret rooms and passageways have been uncovered, or all of the available goodies such as weapons, ammo, or health potions have been found. For this reason the game remains playable even after the final level has been completed.

THE BAD GUYS:

Zombiemen: Former Marine grunts, now ready to shoot you on

sight. They're the easiest to kill.

Former Sergeants: Not much different from Zombiemen, but a bit harder

to kill. You can tell a Sergeant by his spiffy

black uniform.

Imps: Loud, mean, and ugly, Imps throw fire balls at you

every chance they get and take three or four pistol

shots to fell.

Demons: Big, top-heavy, pink, and much more harmful than

Imps, Demons bite and tear at you at a fearful cost

to your health.

Lost Souls: They look like comets with faces, they fly at you,

wailing and sapping your strength.

Cacodemons: Large, floating balls of nastiness that just keep

coming and coming.

Barons of Hell: Big, smart, tough, ram-horned muscle-men. They lob

massive pulses of energy at you and simply laugh at

all but the most destructive of your weapons.

#### **GRAPHICS**

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I was at first slightly disappointed by DOOM's resolution, comparable to the low rez mode on a PC, but after only one level resolution ceased to be a concern. When I was a child and my parents tried to interest me in reading instead of watching television (they succeeded, by the way) my mother pointed out that the monsters that we create in our minds are scarier than anything they could put on television. What Jaguar DOOM does is almost as good. I've noticed that the opponents that I see are much more "defined" than what the Jaguar shows. And since less resolution allows the Jaguar to spend more of it's precious CPU time manipulating the scene, motion is quite smooth and the PC version's slight delay between mouse, keyboard, or joystick input and screen updates has no counterpart on the Jaguar. There are no jerky movements, slowdowns, or jitters.

Although this incarnation uses a lower resolution than the PC version's best, this is compensated for by the fact that Jaguar DOOM uses more colors than the PC version's 256.

I started out making a conscious effort to avoid making comparisons between this version and DOOM on other platforms but, let's face it, the question on the mind of anyone who has played DOOM on another platform is going to be "How does it measure up to the <fill in the blank> version".

As I've already stated, Jaguar DOOM plays not faster, but smoother, than the PC version and, as I haven't mentioned before, it includes side and rear views of your opponents unlike the version for another popular game machine. This makes it much easier for your opponents to shoot each other while trying to hit you.

#### MUSIC/SOUND FX

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In keeping with the Jaguar's abilities, all sound is 16-bit (CD quality) and is quite crisp and clean. The sound effects are faithful to the original and set the mood well.

Music is absent (but not noticeably so) from gameplay, but accompanies the title screen and "intermissions" between levels. Anyone used to the PC version will immediately notice the absence during play, but it is soon forgotten in the heat of battle.

Sound volume can be adjusted via the "Options" screen at any time by hitting the "Options" button on the Jaguar Joypad (isn't it funny how these things work out?). Volume settings, as well as the highest level attained are held in flashram memory within the cartridge and remain until you change them.

#### OPTIONS

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After the Title Screen is shown, the Menu Screen allows the user to decide which mode will be used. The options are Single, Co-Op, and Deathmatch. Single is the normal mode of play in which you face the bad guys alone. Co-Op allows you to play in conjunction with another player, and Deathmatch allows you to fight against another player instead of monsters.

Co-Op and Deathmatch modes require two Jaguars, each with their own television or monitor, and a JagLink cable. Because of the high rate of data exchange between Jaguars, Network errors are not an uncommon occurrence. After a network error players will be placed in random locations. Due to a lack of a JagLink cable (not to mention a second Jaguar), I haven't played either of these modes.

The Menu Screen also allows you to set the difficulty level of gameplay. In ascending order of difficulty, the levels are: I'm a wimp, Not too rough, Hurt me plenty, Ultra-violence, and Nightmare.

The Options screen allows you to set the sound volume and re-arrange the control buttons. If you are not comfortable with the standard arrangement of using button A for speed, B to fire, and C to push or strafe, you can change them to your liking.

#### ENTERTAINMENT VALUE AND GAMEPLAY

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DOOM is not as "intense" as Alien vs. Predator and is much more enjoyable to me because of it. While AvP tends to produce a tense mood, often resulting in the player acting like a hyper-active pre-adolescent after a double Espresso and three cans of Jolt Cola, DOOM provides steady action at an entertaining level. Because of the graphic nature of the action (ie: constantly shooting weapons at human and humanoid figures and the gratuitous graphics and sound), DOOM may not be suitable for younger players.

#### THE MANUAL

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As with the manuals for all of the Jaguar games that I've seen, the DOOM manual provides all the instructions necessary for the uninitiated player to jump in and start smoking bad guys. It provides graphics of all opponents, weapons, and items that might help you along the way. It also sets the mood with such light-hearted phrases as: "...you're the toughest trooper ever to suck vacuum" and "Don't get too close or they'll rip your friggin' head off". The message that the manual conveys is quite clear: It's just a game... go ahead and blast some mutants!

#### ONLY TWO DISLIKES

Okay, this is probably the shortest list in the review. My biggest disappointment with DOOM was the lack of a true "SAVE" feature. The Jaguar keeps track of the highest level completed and will not normally allow you to move to a level unless all lower levels have been completed. The one secret level is an exception. The secret level is accessed via an alternate exit from a much lower level. You cannot save your position within a level, only the level itself.

The ONLY other complaint I have about Jaguar DOOM is that, when hugging a corner, you can sometimes get stuck as if there is an invisible obstacle blocking your movement. This results in the need for making wider turns which, if there are bad guys around the corner, can result in a loss of health.

#### HYPE

\_\_\_\_

Since the PC version of DOOM is so popular (many say that DOOM sells as many PCs as WINDOWS does), this one was a tall order to fill. There will no doubt be comparisons between the different "flavors" of DOOM, and the Jaguar version will be right at the top. It can stand toe to toe with DOOM on any other platform and compare quite favorably. Because of the profusion of hidden rooms, the challenge remains even after the game has been completed the first time (looking for the hidden level gave me fits for quite a while).

Graphics : 8.5
Sound FX/Music : 9.0
Control : 9.0
Manual : 9.0
Ent./Gameplay : 9.5

Reviewer's Overall Average: 9.0

#### SUMMARY

\_\_\_\_\_

While DOOM didn't turn out to be the game-to-end-all-games, it is still a very good game which does not pretend to be anything other than what it is: A fast paced shoot 'em up with all the bells and whistles that game players have come to expect. It's well worth the money, and will remain entertaining and enjoyable for quite a while.

> Jaguar Easter Eggs/Cheats/Hints STR InfoFile - Solving Those Riddles!

From Compuserve's Atari Gaming Forums, courtesy of Jeff Kovach:

Well, this isn't exactly something that you could call a tip or trick. It's more like a tiny little undocumented feature in the game. Nothing to get excited about, but still one of those things that makes you wonder what other kinds of details they've slipped in...

Anyway, when selecting your armaments, you can make the image of your

IS rotate to the left and right slightly. To do this, simply use the 1 and 2 buttons on the keypad while the selected weapon is 'flashing' on your IS.

So far for this game the following 'secrets' have been revealed:

- a code to enable all missions and weapons
- a code to turn on 'Insane' difficulty mode
- button 8 brings up HUD during gameplay
- 'PAUSE' message can be removed from screen
- frame-by-frame available in pause mode
- A and C together allow super fast turning
- IS rotation during weapon selection

In case you couldn't tell, I'm really fond of hidden features in games!

> ONLINE WEEKLY STReport Online

The wires are a hummin'!

PEOPLE... ARE TALKING

On CompuServe -----compiled by Joe Mirando 73637,2262

Hidi ho friends and neighbors. Before we get into this week's (and last week's) scuttlebutt, I'd like to clear up a micro-controversy that popped up this week. In my last column, I made mention of the fact that I had included a post the previous week regarding the Pentium FDIV bug that hadn't made it into the published column. I made mention of the fact that STReport was composed on a Pentium machine and posted that perhaps that was the reason that the piece hadn't made it into the column.

Someone asked me online if the publisher would actually cut something out because it made fun of the type of computer he used. My answer to that is a resounding "NO". I had thought that my meaning was clear enough, but it now seems that I was wrong. What I had meant to imply was not that personal opinion had caused the text to be removed but that the flaw in the Pentium processor had caused it.

There. Now that that's out of the way, let's get to this week's info... heck, maybe there'll even be be something controversial for us to hash out again next week <smile>.

From the Atari Computing Forums

Ann Zachman tells us:

"I'm having trouble finding a comm program to work with my 1040st. I need to run it off a floppy, since I don't have a hard drive, and I \*believe\* I need one that uses VT52. I've tried a couple, that I found in the file finder, but have gotten error messages trying to load them. Does anyone know of, or have a comm program that they've successfully used under these conditions? I'd be willing to accept a copy sent via email postage due if someone would be willing to send it if one isn't in the library somewhere."

Albert Dayes of Atari Explorer Online Magazine tells Ann:

"You might try STorm which is shareware and it is in the library."

Sysop Bob Retelle asks Ann:

"What error messages have you gotten with the telecom programs you got from our software libraries..?

They should all work from floppies on a 1040 as far as I know..."

#### Benjamin Voiles tells us:

"I have just installed a Gemulator into a Pentium 60. I do not completely understand how to use the different video modes. I also tried place the hard disk driver in an auto folder on floppy so that it would install itself but so far I have been unsuccessful. Also, my system loads from both floppy and hard drive very slowly is there any way to optimize the system. I have been loading it under windows, could this be part of the problem?"

#### Robert Carpenter tells Benjamin:

"First of all, the different video modes are accessed via an AUTO folder program VGA.PRG. This program gives you a menu of resolutions to choose from. You'll need to know the chip set of your video card in order to pick the right choice

To install the hard disk driver, you'll have to run HINSTALL (if you're using HDX 5.0) and choose the "Install" option. Having the hard disk driver on a bootable floppy will allow you to access the hard drive, but it will not make the hard disk auto booting."

Robert Aries posts this about his computer usage habits:

"We got a Mac for my wife, who's going back to grad school. My ST is doing just fine in my music studio.

There are quite a few things about the Mac that took getting used to. After using a computer whose OS is in ROM, some of the Finder operations seem sluggish (especially when the hard disk has spun down and I have to wait for it to get back up to speed -- a characteristic of all Powerbooks). And, there's no doubt that Mac software is expensive. From what I've seen, the freeware & shareware Mac stuff is NOT up to the level of what's available for the Atari.

Still, I'm not sure that a Portfolio could do what my wfe needs --writing 20- page papers with assorted graphs & charts, etc. Like you said, each has their uses."

Jon Sanford tells Robert:

"I have been trying to learn to keep my mouth shut about all the places the Mac is Kludgey comparied to AtariST 2.06. Mac people won't believe me anyway. Eaven alowing that screen redraws are slow on any LCD screen. The Atari feels like a sports car The PB like a Buick."

#### Robert tells Jon:

Richard Brown adds his thoughts on the matter:

"I have a PowerBook as well - I got tired of carrying a Mega 4, Megafile 88C, eight Syquest platters, keyboard, mouse, modem, and Bubblejet printer along (as carry-on!) on my frequent trips to Los Angeles (I keep a monitor there). So, like you, I use the PowerBook for CompuServe and AOL, but the GEnie front end for the Mac is a dog with fleas, to be complimentary.

Regarding Word 5.1: Atari That's Write from Compo kills it dead. Nothing beats programmability in word processing. As a screenwriter, my TT does things Word 5.1 wouldn't dream of doing. That's Write is so programmable via an extensive macro language, including control of dialog box buttons that I've been able to make it outperform even \_dedicated\_ screenwriting software like Final Draft - the "only" recommended Mac scripting package according to LA's Writers Computer Store. While I own Final Draft, it is SO SLOW next to That's Write (we're talking 5-10 times faster, here) and my macro set that I would never use it for scripting. I sometimes port a screenplay over to Final Draft for travleing with the PowerBook, but using the Mac for general scripting is like writing with a dull crayon on hot asphalt - not too effective. Of curse, I just got Word 6, and it claims to have macros at long last. We'll just see. Implementation is the key. And then there's the lack of the delete key...

We must also remember that the Atari has other WP's that are top notch. Papyrus does things you can't even do in DTP, and bridges nicely the gap between WP and DTP, with perhaps the best spell checker ever in any program. It has Mac-esque niceties like marking and then moving blocks of noncontiguous text, freely placeable text and picture boxes with anchoring, and more. Using a host of on-screen toolboxes, a huge amount of control is possible (the microspacing control is out of this world), and it is a pleasure to use with the TT's 19 inch hi-res screen, as the program has fully variable zoom control (up to the resolution of the target printer to 2,400 dpi).

Printing to my LaserJet 4MP from either That's Write or Papyrus yields quality equal to my Macs or IBM's at there best - there is no "gap" as there once was thanks first to Speedo, and now NVDI's support of bezier outline fonts, which include Bitstream Speedo, Truetype (NVDI and Speedo), and PostScript Type 1 (Speedo).

Additionally, Calligrapher is a powerful choice, extremely fast with built-in TypeAlign-esque curved text path options, full bar code implementation, and, like That's Write, extensive footnote capabilities and more. The weakness here - no Speedo support. Calligrapher went the other way with its own, non-bezier but straight line segment outline

technology. That's for those with non-PostScript printers. Calligrapher will also allow substitution of PostScript faces via the printer's internal fonts, but this, of course, is limited to the standard 35 fots. (That's Write also has a PostScript version which prints \_instantly\_.)

Regarding the backspace/delete key problem: highligting the text and hitting delete also works on the Atari, it's just that, if it's a word just to the right of the cursor, a true \_forward\_ delete key would take it out about a week faster than goofing with the mouse! :)

Regarding your past dilemma over the GCR, the funny thing about anything Mac that is sub 40 MHz 68040 / System 7.x - the Spectre GCR under System 6.05 emulating on a 16 MHz 68000 Atari (like an Adspeed Mega) sure feels a LOT faster! My PowerBook (soon to move from a 145 B to a 540 C) is amazingly slow doing a great many things. 15-20 seconds for a floppy read is common. 8-10 seconds to display the hard disk directory, etc."

#### Robert tells Richard:

"I hear everything you're saying. I'm into music, and it's just amazing how much better my almost \*nine\* year old 520st with Dr. T sequencing software is than these much-touted Mac programs like Performer and Vision. And my sequencer can be had for \$60, as opposed to \$300+ for the Mac stuff!

You've definitely gone farther into the Atari high-end than I have. My original 520st is now at 2.5 megs, and I installed TOS 2.06. The system was floppy- only up until about two years ago, when I bought a used Megafile 30. Now I run it off a floptical, which is a bit of a pain (each disk is 21 megs, and switching them means waiting 15 seconds to re-read the directory) but the lack of any fan or HD noise in my music studio is worth it.

I've switched to the Mac for telecommunicating ONLY because the Atari has problems with the new 14.4 modem I just got. Flash I (which I used) can't handle over 5K or so of continuous data at 14.4kb without choking, and CIS QB/B+ doesn't work at all at that speed. I tried the Flash II demo but the text scrolling is so slow compared to I (they switched to the "GEM-legal" way of printing text to the screen) that it negates the speed upgrade. This is a big drag as Flash I is superior, IMO, to ZTerm which is what I'm using for now. ZTerm's capture buffer features are nowhere near Flash's, forcing me to switch to Word to compose replies.

Of course, there are some pluses. Since I haven't gone to the TT and larger monitor like you, I find the Mac's 640x480 at 256 colors pretty cool, even thoug in the Mac world that's considered to be the bottom end! And my word processing experience on the Atari is limited to ST Writer and Word Writer. You'll probably agree that Word looks pretty good compared to those!

Of course we could go on until we're blue in the face about all this. Maybe others considering going from the Atari to a Mac will read this thread and get some insights. I'd agree that for someone needing to run Mac stuff where system 7, midi, and color support isn't needed, Spectre would be a good choice (hey, if GBS has solved those limitations, someone jump in here!)."

Dan Danilowicz asks for help with his monitor:

"This must be a common problem with the ST platform getting to be 10 years old: what causes the monochrome monitor's display to shake? It started doing it only last week. It's slight, but annoying, and I'm sure it's a component inside going bad, since the color monitor is still rock-steady. Is this a matter for the dealer, or is there a little thingy inside I can get to and replace fairly easily?"

Sysop Bob Retelle tells Dan:

"There is one component in the Atari monochrome monitor that's somewhat prone to failure, but the symptom is usually just that it suddenly stops working.

Monitors do develop "shimmies" like you described over time.. if it gets too bad you could try to find a repair shop that can handle Atari components, or see if you can find someone selling one... (of course, it too would be in the almost 10 year old range too, probably...)

My monochrome monitor tends to wiggle a bit if I have it too close to my color monitors when the re all turned on.. have you moved your monitors lately..?"

Our own Atari Editor, Dana Jacobson tells Bob:

"This thread interests me. I have a multisync that is displaying these "characteristics" when in mono. Color is fine, if not faded if I don't let the monitor warm up a bit before turning on the system. In mono, the screen shimmies bad, from either a quarter of the screen down (or up, can't remember offhand) to the opposite end of the screen. It can get so bad that it's difficult to work with, especially when doing word processing or DTP work. Any ideas if this is something that can be fixed? Why does it only happenin mono mode and not color?"

#### Bob tells Dana:

"The Atari monochrome monitor uses a vertical sync rate of 70 hz to help give it the characteristic sharpness you see, while the color monitors sync at the more normal 60 hz. That would probably help explain why the problem only shows up in monochrome.

It sounds like your monitor has problems syncing at the higher scan rate.. has it always done this, or has it developed over time..?"

#### Dana tells Bob:

"I've had the monitor for about 2-3 years, and it's a relatively new problem (say, perhaps over the last 4 months)."

#### Bob concludes:

"Sounds like age is setting in... we have monitors that have developed that wiggle symptom at work. they get progressively worse until everyone starts getting "seasick" working with them...

Unfortunately I can't think of anything that you could easily do to fix it.. sounds like a trip to the computer doctor may be in order if it gets to the point where you can't read it."

As you no doubt know, there has been something of a storm raging around the decision of UniSys, the company that holds the patent on the compression used in GIF graphic format (among other things). It seems that they have always held the patent and have always had the option of charging for its use. The furor is over the fact that they have just decided to enforce the patent. Let's take a look at what folks like you and me are saying about it...

#### Mark Hayton asks:

"I've been told that the LZW patent is not on the decompression of LZW, just the compression only. If this is true then all the programs that just VIEW GIF files would be ok.. it would just be the programs that SAVE GIF files that would have to license the LZW algorithm. Is this true or does anyone know?"

### Tim Wegner tells Mark:

"I know there are informed people who have that view, and informed people who say decompression \*is\* covered.

I can tell you this: I have looked at the patent itself, and it has a zillion claims for encoding, followed by a zillion claims for decoding. This is not a legal opinion, but it sure looks like the patent was written with the idea in mind that decompression \*was\* covered."

#### Dan Farmer adds:

"If Unisys even \*thinks\* that it has claims on decompression, then decompression is out for anyone not willing to fight the claim in the courts."

#### Tim tells Dan:

"Exactly. That's the trouble with this legal stuff. Anyhoo, I have seen the patent, and it sure \*looks\* to the uninitiated like it covers decompression. There are all kinds of claims specifically mentioning decompression."

# Steve Sneed adds his thoughts:

#### "All I know is:

- (1) Unisys claims that the patent covers both compression and decompression. Certainly, the patent document itself claims to cover both sides of the equation.
- (2) Unisys' patent has been reviewed and upheld at least once by the Patent Office.

These two items make me believe that decompression is covered."

#### Ed Hamrick tells Steve:

"That's the whole point of legal blackmail. If a company is willing to spend money threatening to take someone to court over amost anything, and it is arguable enugh to not be judged frivolous, and if the settlement offered is less than the expected legal fees, then any rational company will settle.

People will ettle regardless of their expectation of prevailing. It doesn't really matter if Unisys would have won if they had taken CompuServe to court - it was probably cheaper for CompuServe to settle.

Legal blackmail is endemic in the United States. Why do you think there are so many lawyer jokes?"

#### Dan Farmer posts:

"At this point, I don't believe that we have any reason to believe that decompression is not covered. On the contrary, everyone that's studied the patent seems to say that it "seems to be covered".

#### Ed Hamrick tells Dan:

"The development team of GNU ZIP (gzip) believe otherwise. They've claimed gzip is free of patent problems, and gzip includes LZW decompression (but not compression)."

#### Tim Wegner tells Ed:

"Not so. Gzip includes a variant of LZ77 compression, definiely \*not\* LZW. Gzip has been thoroughly researched and is as safe from patent problems as is possible under the present circumstances."

#### Ed Hamrick tells Tim (and the rest of us):

"The main point... is there exist people and patent attorneys who sincerely believe that a program that only contains LZW decompression (and doesn't do LZW compression) doesn't violate Unisys' patent.

Whether this is true or not is irrelevant, since the way the U.S. legal system works is that when the license fees being demanded are smaller than the expected legal fees, most rational companies will pay the license fees. This is a side-effect of the way the legal system works, and makes Unisys' legal blackmail effective. Since Unisys has little to lose from bad PR (they don't market many products to the general product), they can do this. IBM has a lot to lose from bad PR, so they're unlikely to do this."

#### Don Milne adds his thoughts:

"I don't think it does. ZIP and friends use an LZ variant, certainly, but it \*doesn't\* use the LZW variant covered by the Unisys patent. ZIP (and GZIP I presume), uses a sliding dictionary implementation of the LZ 2 scheme."

#### Dick Oliver tells us that this is...

"A good time to bring a reminder into this discussion that the current LAWS may not be problematic. After all, as I understand it (dimly! <g>), no patent is supposed to be awarded for software techniques which have prio use or are "obvious in the field." The means all the RLE and XOR-cursor and linked list patents are technically illegal.

The real problem may be that the people in the patent office have no idea whatsoever what they're doing, or what's "obvious" and what's not."

# Paul Schmidt makes a good point:

"...Unisys has hundreds (if not thousands) of algorithm patents, and they pursue patents on a regular basis. This move to cover GIF is not going to make Unisys a heck of a lot of money compared to modem licensing, for example.

If a large corporation is in trouble, the last thing they're going to be very interested in is picking up a project that is (1) bad PR, (2) very, very low margin, and (3) legally very difficult to enforce.

Now, if they charged 10%, then they could make some money to go with their new found enemies."

#### Mike Edgerton tells Paul:

"The other reason that Unisys might have decided to finally go after the GIF format is that one of the many manufacturers of modems that is currently paying royalties to them might have raised the issue. If in negotiations, one licensee had said "why should we pay you at all, you're not charging he GIF folks", I'm sure that flags would have been raised, and Unisys would have been obligated to pursue the matter no matter what."

#### Paul tells Mike:

"This is true, although there has been a tremendous amount of talk in the world about Unisys not pursuing software implementations. Modems, no matter how software like, are a piece of hardware, and it would be very easy for Unisys to defend that notion, even if the LZW ode was loaded into RAM.

But, you're right. This could be a necessary reaction to something we can't see behind the scenes. From my dialogues with the Unisys attorneys, I did not get the impression that this was a defensive mve. It seemed to me that this is more a "business as usual" thing for them."

#### Ed Hamrick adds:

"Unisys doesn't market many of it's products directly to consumers, so they don't get hurt much by bad PR. They've only spent energy going after big pockets of money (like CompuServe), and wouldn't bother filing suit against a small shareware developer - they wouldn't recoup teir legal costs.

Unisys is doing what many companies do - they're involved in simple, legal blackmail. The cost of defending a lawsuit for patent infingement is always higher than the license fees they ask for, so it really doesn't matter whether the patent is valid. This is a problem caused largely by our legal system that doesn't havethe person who sues pay the legal costs of the other side if they lose. Companies like Unisys that don't care abou PR can get away with this - oh well...

Unisys' stock price will only suffer in the face of bad PR if people

stop buying their products. Since they don't market products to consumers, bad PR won't hurt them much (unfortunately). However, they are quite capable of going out of business without the help of bad PR, and are well on the way to fading away. Unfortunately, it takes 10 years for a company their size to fade away - look at how long it took Control Data Corporation (CDC) to almost go out of business (even though a few scraps remain)."

From The Sega Forum

On the subject of playing 32X games on the as-yet-unreleased Saturn, Stanley Chow posts:

"State-of-the-art games written especially for that system not games of a lsser technology that are compatible with my system. I'd rather the Saturn be 32X incompatible and have it be a bit cheaper.

Making the Saturn 32X compatible to encourage developers to contnue developing for 32X may appear to be sound reasoning at first but if you think about it for a while you will realize that it is a fallacy. For the Saturn to be successful the system is going to have to strong complement of sotware available for it. This software has to be written especially for the Saturn and make the statement that the Saturn is WAY BETTER than the 32X otherwise consumers will not be able to justify the Saturns premium price. With a full complement of Saturn software, Saturn owners are not going to buy 32X ames just because they are compatible.

One might argue that there won't be enough software for the Saturn in the beginning so the 32X software could fill in the void at the beginning of the Saturn's life. Once again, if the Saturn is going to be successful then this void can't last very long and 32X developers should not rely on software starved Saturn owners to buy their software.

The bottom line is that 32X has to survive on its own merits. 32X developers that think that Saturn owners are going to be a part of the market for their games are either fooling themselves or hoping for the failure of the Saturn market."

Assistant Sysop Joel Hilke tells Stanley:

"...a big selling point for a system is what you can do on it when it's released. If, say, Jaguar was released with Genesis compatibility (I know it would never happen - but it's an example) then it would have had 3 games to play, plus a ibrary of over 500 Genesis games. Granted, they wouldn't have been as good s Jag games (theoretically) in graphics and sound, but that doesn't make them bad games and give the consumer a larger library to choose from. Afterall, here's only so much Cybermorph and Trevor McFur a person can handle.

Now, take the Saturn. If it comes out here with Daytona and Virtua Fighter only there will be a lot of people saying, "Yea, but I want NHL Hockey." Well, NHL Genesis could tide them over until NHL Saturn comes out. Of course, if you still have a Genesis, you could leave it next to the Saturn and swap between them, but wouldn't compatibility be just a lot easier?

... Historically (Genesis, SNES, CD, Jag, 3DO) it takes a while for

developers to make the great games for a system. Surviving on its merits has always taken a lot of precious time. Never hurts to use a crutch until you can get up on your own two feat.

I think I would buy a more expensive Saturn to get backwards compatibility. Depending on how backwards it got - if we're talking about Genesis/CD/and 32X then I'd definitely spend considerbaly more - and then I could pawn off my FrankenSega! If only 32X compatibility, that would be nice, but I wouldn't be willing to spend \_too\_ much more."

Well folks, it's been a tough couple of weeks for me. My aunt died two weeks ago and it's been a strain all the way around.

Be sure to tune in again next week, same time, same station, and be ready to listen to what they are saying when...

PEOPLE ARE TALKING

> STReport CONFIDENTIAL "Rumors-Tidbits-Predictions-Observations-Tips"

Our "Super Snoop" has found a bright side to the anger, apprehension and dismay resulting from the "GIFiasco" that has decidedly caught the attention of the world's computing community. It appears they (Unisys) do not have their "sights" solely set on the programming community as a whole nor the OnLine networks as most had thought.

As for the pending agreement: Here's the straight skinny.. The GIF/LZW deal will appear like this;

Unisys has authorized Larry Woods of the Go Graphics Forum on CompuServe to announce that they now have a GIF/LZW or a GIF/TIFF/LZW developer agreement ready for the developer community to consider. The following is Larry's reading of the agreement.

GIF/LZW ... \$25 license fee up front, creditable to future registrations; a .45% royalty on total selling price, per unit, not to be less than \$0.10 per unit nor more than \$10.00 per unit.

GIF/TIFF/LZW ... \$50 license fee up front, creditable to future registrations; .65% royalty on total selling price, per unit, not to be less than \$0.20 per unit nor more than \$25.00 per unit.

For further information and a copy of the written agreement, call (215) 986-4411. Please advise them if you are a CompuServe-'Go Graphics' Group Shareware author. We don't get a kickback [g], but we want them to know where the registrations come from.

As I read the agreement, there are no unfavorable terms which would preclude any developer from making use of this agreement to cost effectively continue GIF and/or GIF/TIFF development.

Larry will be available later tonight in the forum to answer further questions. Please keep questions one to a message so I can handle what I am sure will be a flood of questions.

As one un-named industry observer put it... this is a very good arrangement for everyone from the little guy right on up to the heavy hitters. The observation was also made that this agreement seemingly makes it fairly obvious that Unisys has a far greater goal in mind. Or, as they say in the north woods, "a much bigger fish to fry".

# - Redmond, WA

MICROSOFT REDESIGNING COMPRESSION?

My, oh my! But our snoops have been busy! Reportedly, A hot, fast moving rumor emanating from somewhere in the great northwest goes something like this... Seems a certain biggie is paying attention to the latest uproar over LZW and GIF. Therefore, it appears there is seemingly a new compression scheme (algorithm?) aggressively being sought. This is also rumored to possibly be one of the deciding factors in the recent delay announced relative to the anxiously awaited Win'95. It was also rumored there would perhaps be litigation over the entire matter.

Once the rumors began to fly , our editor called the man most folks regard as the authority about "things graphic" in the computing community; Larry Woods. When Larry was asked if he felt the rumors were or, could be basically true, he replied "yes and the agreement's excellent". In fact, he almost sounded jubilant. He went on to say that he was glad to know the beginning of the end to all the gloom and doom recently enveloping the graphics and desktop publishing community was at hand. "Everybody should be very pleased with the good news from Unisys". He said.

- Washington, DC

PRODIGY SIGNS UNISYS AGREEMENT

Apparently there are sketchy reports filtering in that Prodigy has signed with Unisys relative to the LZW patent Unisys holds. Other services are soon to follow with AOL (America OnLine) reportedly being "next in line". Speaking of AOL, it appears our super snoop has uncovered a rumor snippet about a possible "Class Action Suit proposal by AOL's Steve Case against Microsoft for having the Microsoft Network code written into Win'95. It was also mentioned that further rumor has it AOL will have to "go it alone" as the other big networks are simply; "not interested".

- Chicago, IL

Well-Known Online Service in TROUBLE?

These are interesting times as far as Commercial Networks are Concerned. ...mentioned one well placed observer to our super snoop. "One major network is fast becoming a "has been" with rapidly dropping subscribers. In fact, its so bad there's a rumor circulating about it closing down before the end of this year". Another vibrant network is picking up those migrating subscribers as fast as they drop" ... he added. Delphi, the "sleeper" of the bunch is the fastest growing and most impressive network at this time among all in the last three years. Of all the networks Delphi appears to be the most progressively minded behind of course, the giant trend setter, CompuServe". He said.

STReport's "EDITORIAL CARTOON"

> A "Quotable Quote"

A true "Sign of the Handwriting on the Wall"
"The Telltale Signs are Beginning to Show"

"I shop 100% with MacConnection and always enjoyed what I thought was the most readable of the mail order catalogs. What a drag to see an IBM ThinkPad on the cover and a Windows icon on page 3! Did you notice that insert in the middle of the catalog has PC Connection as the address. I'll also ask to be removed from their mailing list if they keep this format."

As seen, this past week, in a very popular MAC area....

STReport International OnLine Magazine
-\* [S]ilicon [T]imes [R]eport \*-

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